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Monetary and credit developments in 2013

Côme Roero
Monetary and Financial Statistics Directorate
European Statistics Division

The annual growth rate of the euro area monetary aggregate M3 fell back to 1.0% in 2013 from 3.5% in 2012. The French component of M3 also slowed, slipping from 2.4% in 2012 to 0.9% in 2013.

Economic agents' portfolio choices resulted in significant changes in the composition of monetary aggregates. In France, like in the euro area, the most liquid assets, in particular overnight deposits, recorded the strongest growth in 2013, which explains the dynamism of euro area M1. In France, the growth rate of passbook accounts slowed, dropping from 9.4% in 2012 to 2.2% in 2013. Outstanding marketable instruments (chiefly shares and units in money market funds and negotiable debt securities with a maturity of up to two years) contracted sharply, both in the euro area (–16.2% over one year) and in France (–14.7%).

Loans to the private sector – which are the main counterpart of M3 – grew at a weaker pace than in 2012. Loans to non-financial corporations slowed in France, edging down from 1.0% in 2012 to 0.2% in 2013, and declined in the euro area, dropping from –1.3% in 2012 to –2.9% in 2013. The growth of loans to households was stronger in France (2.5% in 2013, compared with 2.3% in 2012) than in the euro area as a whole (0.3% in 2013, compared with 0.6% in 2012).

Key words: money, housing loans, business lending

JEL codes: E21, F32, G15

1| Slower growth of monetary assets in the euro area

The annual growth rate of euro area M3, which had risen from 1.6% in 2011 to 3.5% in 2012, fell gradually to 1.0% in 2013 (see Table and Chart 1). The French component of euro area M3[1] rose by 0.9% in 2013, i.e. much less than in 2011 (2.7%) and in 2012 (2.4%).

The slowdown in euro area M3 can be attributed to several factors: the weaker growth in overnight deposits (5.8% in 2013, compared with 7.3%

Changes in monetary aggregates in the euro area and France 2011-2012-2013

(outstandings in EUR billions, growth rate in %)

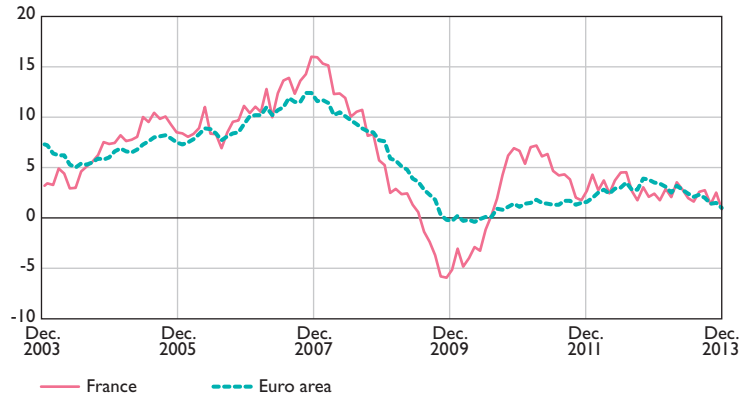
	Euro area[a)]				France[c)]			
	Dec. 2013	Gross annual growth rate[b)]			Dec. 2013	Gross annual growth rate[b)]		
		Dec. 2011	Dec. 2012	Dec. 2013		Dec. 2011	Dec. 2012	Dec. 2013
Monetary aggregates (seasonally-adjusted data) or **Main monetary assets**[c)]								
Banknotes and coins in circulation	910	6.1	2.4	5.3				
+ Overnight deposits	4,481	1.1	7.3	5.8	604	5.5	2.8	3.4
= M1	**5,390**	**1.9**	**6.4**	**5.7**				
+ Short-term savings deposits	3,812	1.9	2.1	-1.7	779	8.0	7.1	1.5
o/w: deposits redeemable at notice of up to 3 months	2,122	1.8	5.8	2.1	625	7.3	9.4	2.2
deposits with an agreed maturity of up to 2 years	1,690	2.0	-2.0	-6.1	154	10.7	-1.1	-1.1
= M2	**9,202**	**1.9**	**4.5**	**2.5**				
+ Marketable instruments	625	-0.9	-6.5	-16.2	344	-7.2	-5.6	-14.7
o/w: money market fund shares	418	-5.1	-3.9	-10.4	261	-9.1	0.0	-13.2
debt securities with a maturity of up to 2 years[d)]	88	29.2	-9.6	-37.5	53	-4.6	-16.8	-24.3
= M3	**9,827**	**1.6**	**3.5**	**1.0**				
+ Gross monetary liabilities vis-à-vis the rest of the euro area					169	-15.5	17.6	18.7
– Gross monetary assets vis-à-vis the rest of the euro area					49	-31.1	36.5	-23.5
France's contribution to M3[e)]					**1,847**	**2.7**	**2.4**	**0.9**

a) Transactions of euro area monetary financial institutions (MFIs) with other euro area residents.
b) Changes adjusted for reclassifications and other valuations.
c) Transactions of resident MFIs with other French residents.
d) Securities issued by resident MFIs.
e) French resident MFI liabilities with a maturity of up to two years (excl. banknotes and coins in circulation) vis-à-vis the money-holding sector of the euro area (euro area residents excl. MFIs and central government) and, by extension, this sector's deposits with central government.
Sources: Banque de France and European Central Bank.

1 The French component of M3 corresponds to the part of M3 managed by French monetary financial institutions.

Chart 1 M3: euro area aggregate and French component

(annual growth rate in %)



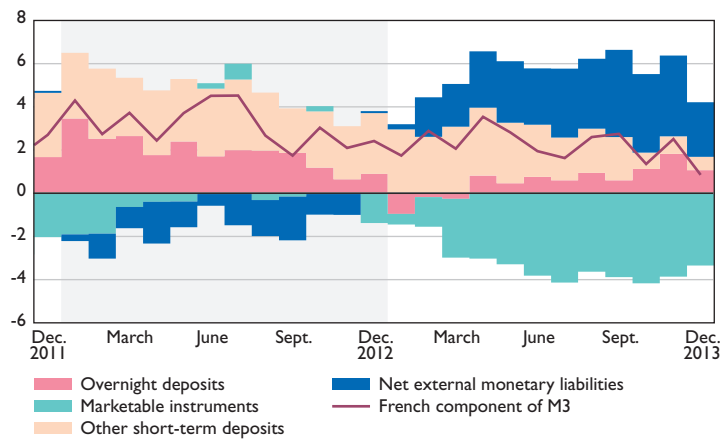
Sources: Banque de France and European Central Bank.

in 2012), the decline in the other monetary deposits included in M2-M1 (–1.7% in December 2013, after 2.1% at end-2012) and the further contraction in marketable instruments included in M3-M2 (–16.2% in December 2013, after –6.5% at end-2012).

The slowdown in the French component of M3 is attributable to the slowdown in passbook savings accounts[2] (2.2% in 2013, down from 9.4% in 2012) and the sharper decline in marketable instruments included in M3-M2 (–14.7% in 2013, after –5.6% in 2012; see Chart 2).

Chart 2 Contributions to the growth rate of the French component of M3

(contributions to M3 growth, in %)

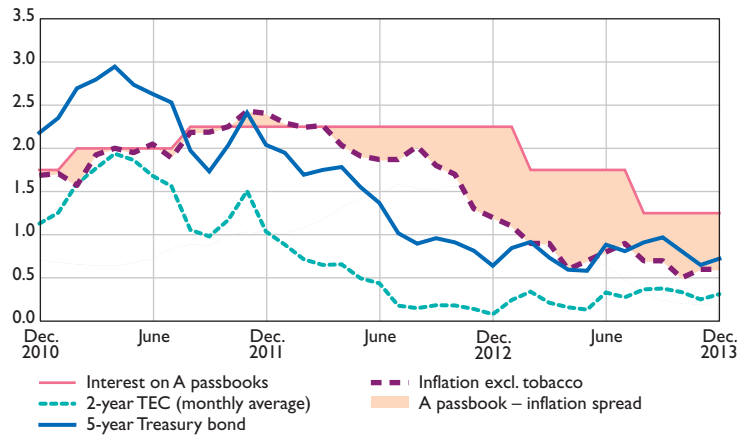


Source: Banque de France.

2 *In the European statistics, French passbook savings accounts come under "deposits redeemable at notice of up to three months".*

Chart 3 Interest on A passbooks

(%)



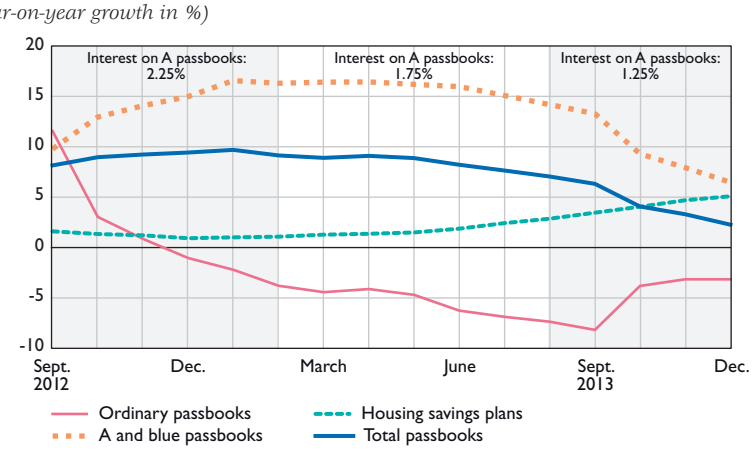
Source: Banque de France.

Conversely, the strong growth in net external monetary liabilities (64.7% in 2013) made a positive contribution to the French component of M3.

The slower growth of passbook outstandings can be linked to the decrease in the interest paid on A passbooks, which was lowered from 2.25% in 2012 to 1.75% in February 2013, then to 1.25% in August 2013 (see Chart 3). Although the growth rate of A and blue passbooks declined (from 15.0% in 2012 to 6.4% in 2013, see Chart 4), it remained relatively high. The growth in these tax-exempt passbook accounts was underpinned by the fact that their ceilings were raised twice, first in October 2012, from EUR 15,300 to EUR 19,125, then in January to EUR 22,950.

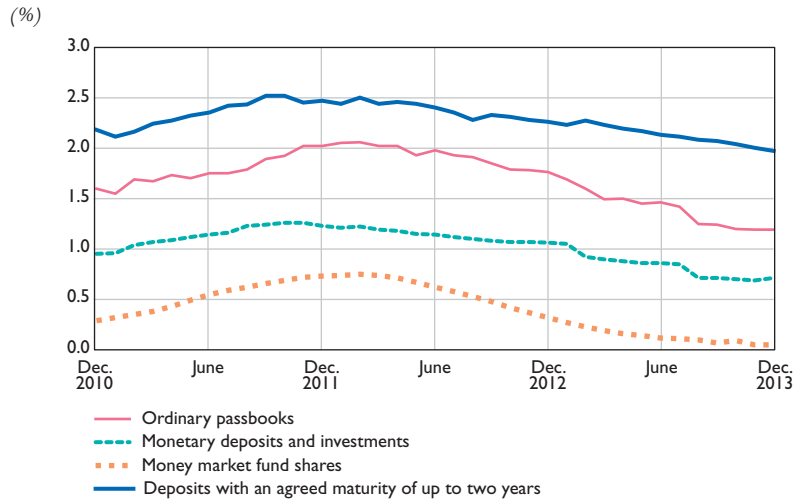
Chart 4 Outstanding passbooks in France

(year-on-year growth in %)



Source: Banque de France.

Chart 5 Remuneration of assets



Source: Banque de France.

In addition, the interest paid on A passbooks was still well above that of other monetary assets with similar liquidity characteristics, such as short term mutual fund shares (see Chart 5).

Ordinary passbook accounts, which are in direct competition with A passbooks, posted a further decline, slipping from –1.1% in 2012 to –3.3% in 2013, while housing savings plan outstandings, boosted by relatively high rates of return like A passbooks, accelerated to 5.0% in 2013 from 0.8% in 2012.

As regards marketable instruments, the decline in money market fund shares, which had come to a halt in 2012, resumed in 2013 (–13.2%) and that of negotiable debt securities with a maturity of up to two years issued by monetary financial institutions (MFIs) became more pronounced (–24.3%, after –16.8% in 2012).

The increase in net external monetary liabilities was much sharper in 2013 than in 2012 (64.7%, after 3.7% in 2012). These liabilities reflect the monetary transactions of French MFIs with euro area clients outside France (i.e. transactions up to two years with households, non-financial corporations, insurance companies and pension funds, other financial intermediaries and general government other than central government).

Box 1

Reminder concerning the change in the calculation of the monetary aggregate M3 in 2012

Since 2007, transactions by banks via clearing houses have greatly increased owing to the crisis, which prompted banks and companies to seek greater security for their transactions, but also because of changes in prudential regulations, which encourage transactions to go through clearing houses by giving them a greater weighting in bank solvency ratios. These transactions take the form of repurchase agreements (repos) and reverse repos, consisting of a sale of securities together with a promise to repurchase at maturity. The clearing house acts as the intermediary in these transactions, determining net settlement amounts and making payments for participating banks. In particular, through its equity and the mutual guarantee funds provided by the counterparties that use its services, the clearing house ensures that transactions are properly completed. In France, LCH.Clearnet SA has the status of a credit institution, subject to all prudential regulations as well as to Banque de France supervision. Similarly, EUREX Clearing AG, the main German clearing house, opted for a credit institution status in August 2013. As a result, transactions whose economic nature had not changed, carried out between credit institutions, no longer had any impact on monetary aggregates while it had been the case earlier on. In order to avoid such problems in the future, the Governing Council of the European Central Bank (ECB) decided on 5 July 2012 to change the method for calculating M3 in order to exclude these transactions conducted via clearing houses. This decision took effect from September 2012 in official ECB publications (press releases, Monthly Bulletin*).*

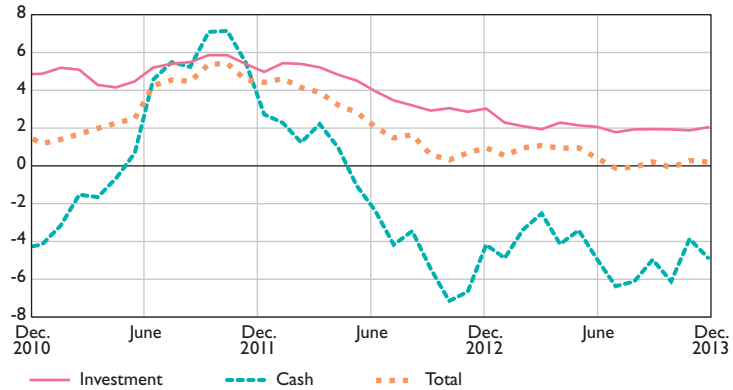
2| Lending to non-financial corporations slowed in France and declined in the euro area

In France, the annual growth rate of loans to non-financial corporations (NFCs) stood at 0.2% in 2013, compared with 1.0% in 2012. Investment loans slowed (2.0% in 2013, after 3.0% in 2012) while cash loans posted a further decline (–4.9% in 2013, after 4.2% in 2012) (see Chart 6a).

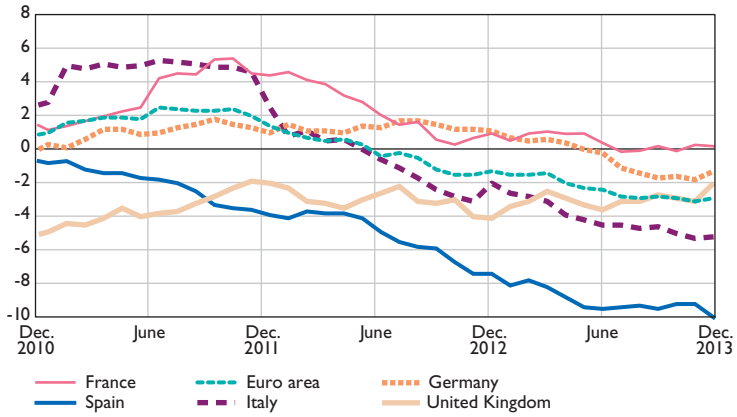
Lending to NFCs appeared more dynamic in France than in the rest of the euro area where outstandings declined (from –1.3% in 2012 to –2.9% in 2013). Outstandings started to fall in Germany (–1.3% in 2013,

Charts 6 Loans to NFCs incl. securitised loans

a) In France
(annual growth rate in %)



b) In the euro area and the United Kingdom
(annual growth rate in %, seasonally-adjusted)



Sources: Banque de France, European Central Bank and Bank of England.

after 1.1% in December 2012) and continued to decrease in Italy (–5.2% in 2013, after –2.0% in 2012) and in Spain (–10.0% in 2013, after –7.4% in 2012). Conversely, in the United Kingdom where economic activity in 2013 was more dynamic than in the euro area (GDP[3] was up by 1.9% in the United Kingdom and down by 0.4% in the euro area), the decline in loans to NFCs slowed (–2.0% in 2013, after –4.1% in 2012) (see Chart 6b). However, in April 2013, the Bank of England and the British Treasury extended for another year the Funding for Lending Scheme launched in July 2012 (see Box 2).

3 *Source: Eurostat, seasonally and working day-adjusted real GDP.*

Box 2

The Funding for Lending Scheme set up by the Bank of England

In July 2012, the Bank of England and the UK Treasury launched the Funding for Lending Scheme to promote the financing of the economy. Its aim is to encourage British banks to boost their lending to the real economy in order to benefit from lower refinancing costs. The general mechanism is the following: the scheme enables credit institutions to borrow UK Treasury bills according to the level of their loan outstandings and its developments. Banks are then able to convert these Treasury bills into cash either by substituting them for part of their cash reserves or by carrying out reverse repos.

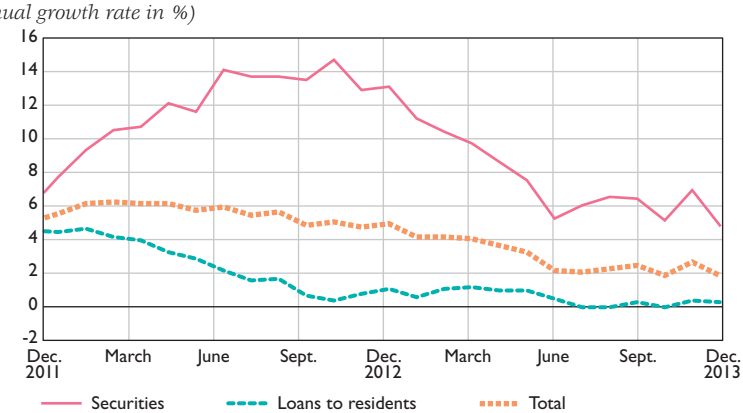
On 24 April 2013, the scheme was extended by one year until end-January 2015. It now includes incentives to boost lending to small and medium-sized enterprises and covers loans to the real economy by non-bank entities.

Given the credit market developments since the start of the scheme, the Bank of England announced further changes to the terms of the FLS Extension on 28 November 2013, which will apply from February 2014 to end-January 2015: loans to households are no longer eligible under the FLS, which focuses on financing businesses, in particular SMEs.

Since 2011, in France, large companies and some mid-sized companies with access to financial markets have financed themselves essentially through securities issuance: they have replaced their bank loans, especially long-term loans, with debt securities (commercial paper, medium-term negotiable notes and bonds). After having reached a high point in October 2012 (14.7%), the annual growth rate of the total outstanding of securities issued by NFCs dropped to stand at 4.8% at end-2013 (see Chart 7). If their bank debt is added to their securities' issuance, NFCs' total debt increased by 1.8% in 2013, after rising by 4.9% in 2012.

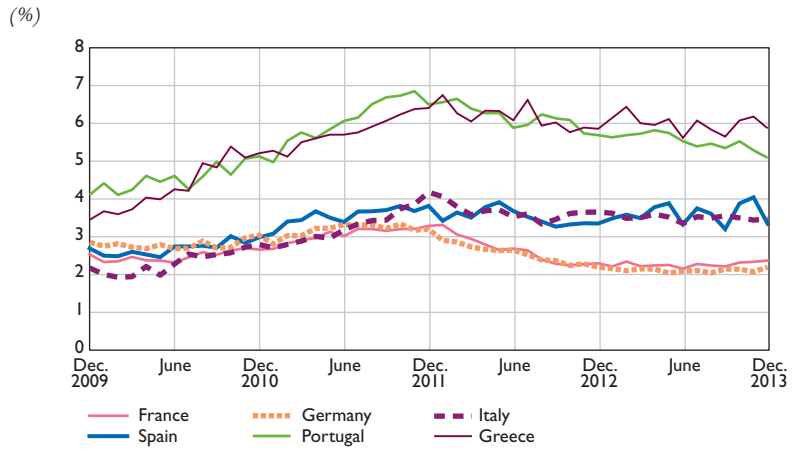
Chart 7 NFC debt in France, by instrument

(annual growth rate in %)



Source: Banque de France.

Chart 8 Average interest rate on new loans to NFCs in selected euro area countries



Sources: Banque de France and European Central Bank.

The average interest rate on new loans extended to NFCs by French banks stood at 2.37% in December 2013, compared with 2.30% in 2012 (see Chart 8), i.e. a level close to that observed in Germany. Elsewhere in the euro area, in Italy and in Spain, the cuts in the Eurosystem policy rates in November and December 2011 then in July 2012 appear to have been only partly passed on to lending conditions to NFCs. This corresponds to an increase in the relative risk premium of Italian and Spanish NFCs, which can be related to the situation regarding sovereign debt. For similar reasons, in Portugal and in Greece, lending rates stood at 5.08% and 4.89% in December 2013.

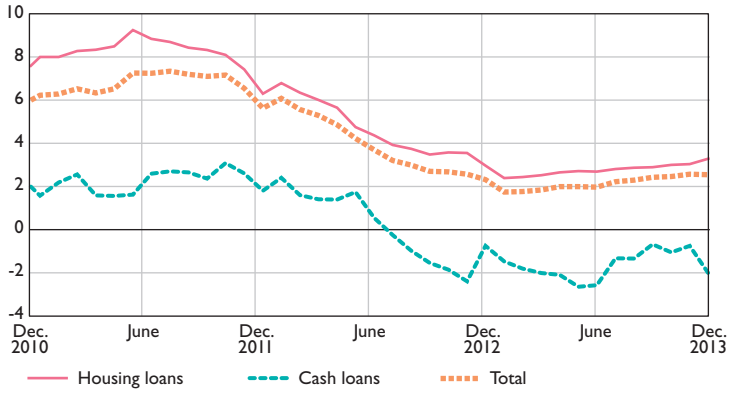
3| Loans to households grew more strongly in France than in the euro area

In France, the annual growth rate of loans to households declined progressively between July 2011 (7.3%) and January 2013 (1.7%). It then picked up slightly, reaching 2.5% at end-December 2013 (see Chart 9).

Lending to households has remained more dynamic in France than in the other major euro area countries (see Chart 10). In Germany, its growth rate has been around 1% for several years. In Italy, outstanding loans to households decreased by 1.2% in 2013 (after slipping by 0.5% in 2012), while in Spain outstandings posted a further decline (–4.6% in 2013, after –3.7% in 2012 and –2.4% in 2011). All in all, for the euro area as a whole, outstanding loans to households increased by 0.3% in 2013, compared with 0.6% in 2012.

Chart 9 Loans to households incl. securitised loans in France

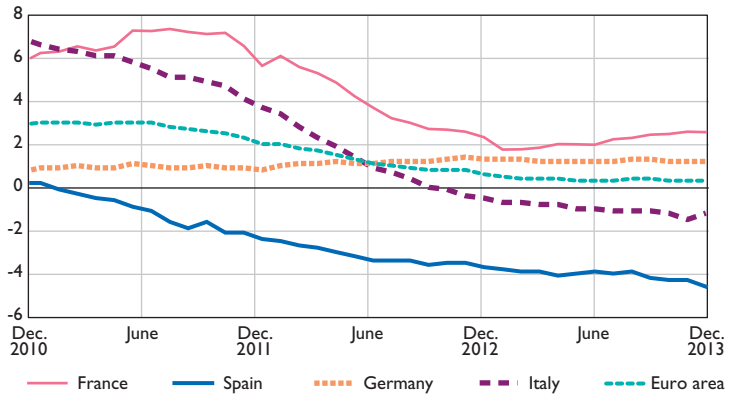
(annual growth rate in %)



Source: Banque de France.

Chart 10 Loans to households in the euro area

(annual growth rate in %)



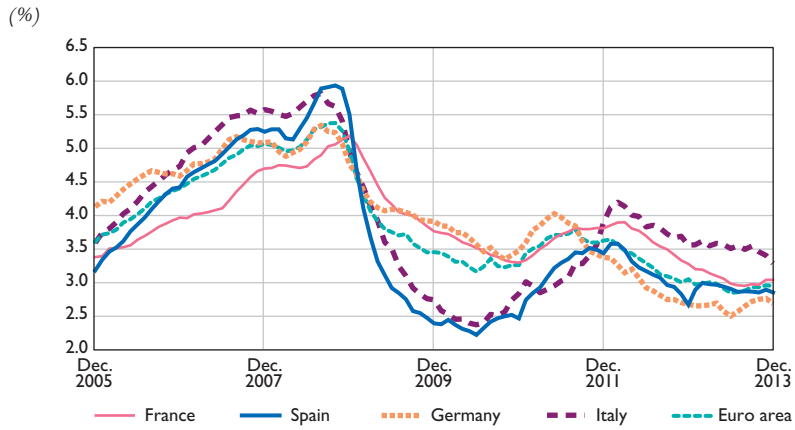
Sources: Banque de France and European Central Bank.

3|1 Lending for house purchases was still relatively dynamic in France

In France, the growth rate of housing loans stood at 3.3% in 2013, slightly above that of 2012 (3.0%) (see Chart 9).

This moderate recovery follows on from the slowdown recorded between May 2011 and January 2013 in a context of successive cuts in tax incentives for property investments and high property prices in certain areas.

Chart 11 Interest rates on new housing loans in the euro area



Sources: Banque de France and European Central Bank.

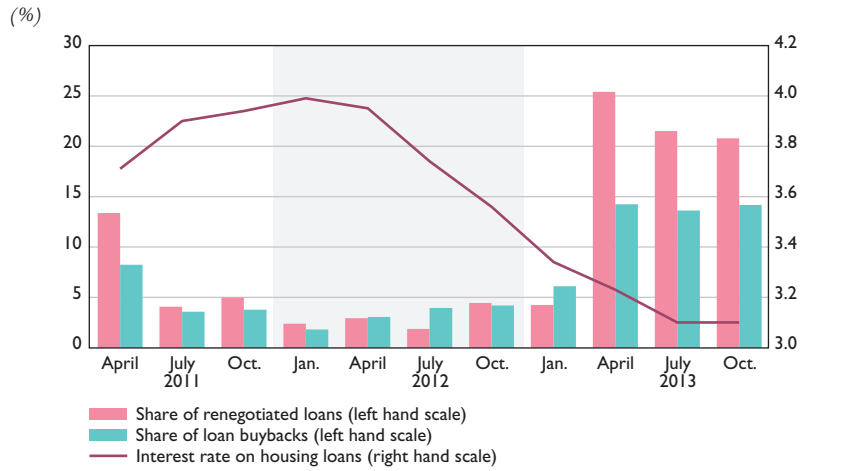
Housing loans to households were also boosted by the slight decrease in their average interest rate which slipped to 3.18% from 3.42% in December 2012. The average rate on housing loans to households in the euro area also declined, but to a lesser extent in 2013, from 3.19% in December 2012 to 3.09% at end-2013 (see Chart 11).

The fact that the average rate was slightly higher in France than in the euro area reflects the large proportion of fixed-rate loans,[4] generally more costly at the outset than variable-rate loans. Variable-rate loans accounted for a mere 7% of new housing loans granted in France in December 2013, compared with for example 69% in Spain and 77% in Italy.

The low interest rates have encouraged a large number of households to renegotiate their existing loans. This trend became more pronounced in 2013: in January 2013, renegotiations accounted for 4% of new loans and loan buybacks for 6%,[5] compared with respectively 25% and 14% in April 2013 and 21% and 14% in October 2013 (see Chart 12).

4 *In France, like in the rest of the euro area, fixed rate loans are loans with an initial rate fixation period of over one year while variable rate loans are loans with an initial rate fixation period of up to one year.*
5 *Information available for every first month of a quarter.*

Chart 12 Share of loan buybacks and renegotiations in new housing loans in France



Source: Banque de France.

3|2 Consumer loans declined

In France, the decline in outstanding consumer credit gathered momentum, sliding from –0.8% in 2012 to –2.0% in 2013 (see Chart 10). This reversal in 2012 reflects the implementation of the Lagarde Act of 1 July 2010 that came into effect in May 2011. The new legislation places stricter requirements on revolving loans, setting a maximum term of 36 months for loans under EUR 3,000 and 60 months for larger loans. In addition, for any loan over EUR 1,000, the law requires banks to offer clients a reducing-balance loan.

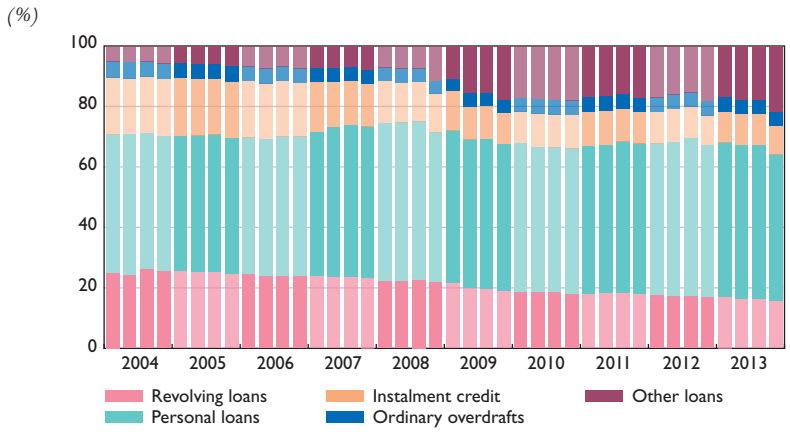
As a result, personal loans have gradually replaced revolving or permanent loans: the latter accounted for 15.7% of total cash loans in the fourth quarter of 2013, down from 18.3% in the second quarter of 2011 (see Chart 13). According to its stated objectives, the Lagarde Act has contributed to the growth of reducing-balance loans, which are less likely to result in overindebtedness than revolving loans.

Changes have also been made to the procedures for determining the usury ceiling. The personal and permanent loan categories were removed in April 2013, following a two-year transition period, and replaced by new categories based on loan amounts (under EUR 3,000, between EUR 3,000 and EUR 6,000, and over EUR 6,000).

The average interest rate on new consumer loans fell by around 25 basis points in France between end-2012 (6.08%) and end-2013 (5.82%).

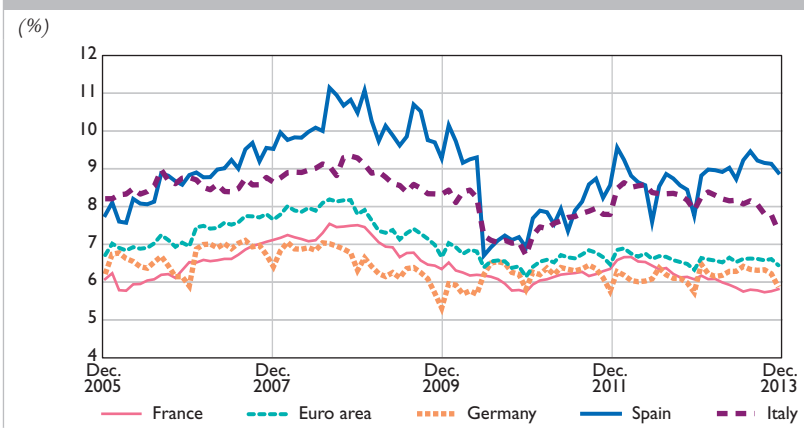
Conversely, in the euro area, it increased by around 10 basis points (6.45% in December 2013, after 6.33% in December 2012). However, this overall trend masks very heterogeneous situations across countries: at end-2013, the average cost of consumer loans was almost identical in Germany and in France; it was much higher in Spain and to a lesser extent in Italy (see Chart 14).[6]

Chart 13 Share of the different loan categories in cash loans to households in France



Source: Banque de France.

Chart 14 Average interest rate on new consumer loans in the euro area



Sources: Banque de France and European Central Bank.

6 *See the* Rapport du Comité de suivi de la réforme de l'usure *on the Banque de France website (*https://www.banque-france.fr/publications/publications/rapport-de-lusure.html*) for more detailed information on consumer credit and the effects of the Act of 1 July 2010.*

Glossary

Collective investment schemes (CIS)

Investment funds established as open-end investment companies (SICAVs) or common investment funds (FCPs). The purpose of these schemes is to manage a portfolio of securities, such as shares and bonds. A distinction is drawn between money market funds, which are included in MFIs, and non-money market funds, which are included in other financial institutions.

Debt securities

Securities including bonds, which are securities that represent a long-term claim (over three years), and money market instruments, which are securities that represent a claim for a specified period and that may be traded on a regulated market or over the counter. Short-term debt securities include Treasury bills, commercial paper, deposit certificates and other short-term negotiable debt securities. Long-term debt securities include bonds and equivalent and medium-term notes (and their foreign equivalents).

Deposits redeemable at notice of up to three months

Liquid savings deposits that offer less immediate liquidity than overnight deposits. In France, these include A and blue passbooks, sustainable development passbooks, home savings accounts, popular savings passbooks, youth passbooks and taxable passbooks.

Deposits with agreed maturity

Deposits that cannot be converted into cash before an agreed fixed term or whose early conversion into cash entails a total or partial reduction of the agreed remuneration.

General government

All non-market producers of a country, including central government, local government and social security funds. Most of their income is derived from mandatory contributions. From a monetary analysis perspective, central government is considered to be neutral, while local government and social security funds are included in money-holding sectors.

Households

Institutional sector made up of individuals, sole traders and non-profit institutions serving households.

Institutional sector

Group of institutional units with a similar economic behaviour characterised by their main activity and the nature of their business.

Monetary aggregates

M1: currency in circulation and overnight deposits
M2: M1 + deposits redeemable at notice of up to three months + deposits with an agreed maturity of up to two years
M3: M2 + repos + money market fund shares/units + debt securities with a maturity of up to two years issued by MFIs.
Only positions vis-à-vis euro area residents that are neither monetary financial institutions (MFIs, see below) nor central government institutions are included in M1, M2 and M3. All assets included in M3 are considered as monetary assets.

Monetary financial institutions (MFIs)

Group mainly made up of central banks, credit institutions and money market funds.

Money-holding sector

Other financial intermediaries, insurance companies and pension funds as well as non-financial agents, i.e. local government, social security funds, non-financial corporations and households.

Money-issuing sector

In France, this sector is made up of the Banque de France, credit institutions as defined in the French Banking Act (with the exception of mutual guarantee companies), the Caisse des Dépôts et Consignations and money market funds. Payment institutions are not included in this sector.

Neutral sector

Central government. Central government is considered neither to hold nor to issue money. However, the most liquid portion of central government's liabilities in deposits is included in the monetary aggregates.

Non-financial corporations (NFCs)

Units with legal personality that are market producers whose main activity consists in producing non-financial goods and services. NFCs may be publicly or privately owned.

Other financial intermediaries

All financial institutions that do not come under MFIs, with the exception of insurance companies. These are mainly non money market funds and investment firms.

Repurchase agreement

An arrangement whereby an asset is sold while the seller simultaneously obtains the right and obligation to repurchase it at a specific price on a future date or on demand.[7]

Residents

Natural persons or legal entities established in a given territory (France or euro area).

7 *See ECB* "General documentation on Eurosystem monetary policy instruments and procedures" *(February 2004), page 83.*

Major French groups were less profitable in 2013, but their cash position was stable and their financial structure strong

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The 77 largest French industrial and commercial groups listed on segment A of Euronext saw a small decline in turnover in 2013. Indeed, their aggregate turnover shrank by 0.8%, having grown by 5% in 2012 and 7.5% in 2011. Revenues were affected by adverse exchange rate effects and by a reduction in the scope of consolidation of several groups as part of an ongoing strategy to refocus on the markets and segments promising the most growth.

Groups' earnings tended to decline in 2013, with a 2% drop in operating profit, combined with a 15% operating margin, unchanged year-on-year. After contracting in 2012, operating income shrank by a further 12%. Net profit was down by 23%. This drop is mainly due to an increase in asset write-downs, with record-breaking EUR 28 billion taken to operating expenses in 2013.

Despite this overall decrease in earnings, the groups are still cash-generative. On the whole, they managed to maintain their net profit margin in 2013, while increasing dividends to shareholders by 5% compared with 2012. The leading listed French groups adopted a cautious approach, with the main aim of deleveraging in 2013 to clean up their balance sheets and maintain a sound financial structure. They also continued to pursue opportunistic borrowing strategies to take advantage of better financing terms, notably by increasing bond issuance: bonds accounted for 59% of their total financial debt in 2013, compared with 56% in 2012.

This means that listed French groups still have a sound financial structure. Equity remained at a high but stable level in 2013. Goodwill accounted for a smaller share of equity, down from 49% to 46%, because goodwill impairment, which had been rare up until now, increased sharply to EUR 11 billion in 2013.

Finally, despite shrinking turnover and earnings, the market capitalisation of the groups under review has grown steadily since 2011. Over 2013, it increased by 22% to EUR 1,117 billion. The market therefore seems confident about a post-crisis economic recovery.

Key words: consolidated financial statements, IFRS, earnings, major industrial and commercial companies, major French groups, other comprehensive income (OCI), companies listed on segment A of Euronext, goodwill
JEL codes: F23, G30, G32, L25

1| Organic growth masked by the impact of consolidation and exchange rate effects

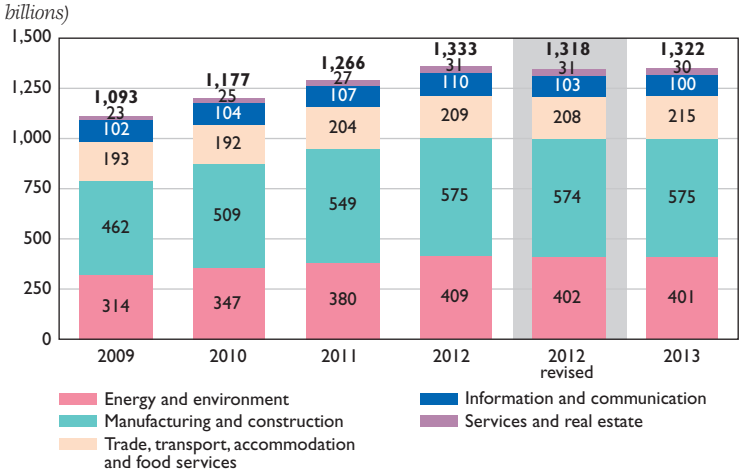
1|1 Major French groups' turnover declined in 2013

Against a difficult economic backdrop in 2013, the total turnover of the 77 largest listed French groups slipped by 0.8%, from EUR 1,333 billion to EUR 1,322 billion year-on-year, following rises of 7.5% in 2011 and 5% in 2012 (see Chart 1). The European debt crisis continued to affect the economies of the euro area, while the economic growth in emerging countries slowed down. Despite the prevailing crisis since 2009, groups' turnover had increased steadily, although a slowdown occurred in 2012. Therefore, 2013 was the first time that the major French groups' hitherto steady business growth faltered.

The impact of this overall trend varied between business sectors. Indeed, sales fell significantly in the information and communication sector, and, to a lesser extent, in the energy sector, while other sectors such as real estate, manufacturing and construction consolidated their activity in 2013. Some sectors, such as trade, even managed to grow. The contraction in the information-communication and the energy-environment sectors stemmed primarily from the disposal or shutdown of certain business lines in 2013. Changes in the scope of consolidation accounted for the bulk of the revisions to 2012 turnover data in 2013.[1] The revised figures show that the

Chart 1 Turnover by sector

(EUR billions)

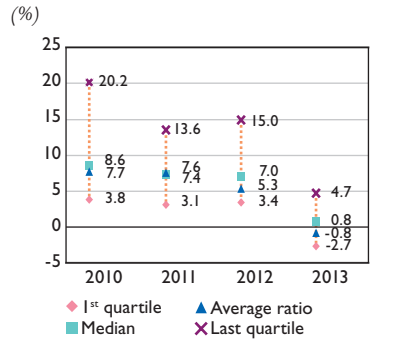


Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

1 See 1|4. These revisions also stem from changes in accounting standards between 2012 and 2013, especially IFRS 10, 11 and 12 regarding consolidation methods. However, turnover is the only indicator of those considered that has been significantly affected by such revisions. The revised 2012 data relating to the other indicators are not covered in our analysis (see Chart 2 and the following charts). The values given for 2012 are those published one year ago.

pro forma turnover of the groups in our sample stood at EUR 1,318 billion in 2012, instead of EUR 1,333 billion. The like-for-like aggregate turnover of the major groups is estimated to have increased slightly, rising by 0.3% in 2013.

Chart 2 Turnover growth



Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

More specifically, groups operating in the aeronautical and luxury sectors saw an increase in business, even though luxury sales softened. The energy sector did less well compared with previous years. Elsewhere, the automotive industry saw yet another fall in sales, while keener competition in the telecoms sector hit individual companies' turnover very hard.

There was therefore a high degree of heterogeneity among groups. The first quartile of the entities in our sample saw turnover drop by more than 2.7%, following a moderate rise of 3.4% in 2012. At the opposite end of the spectrum, the groups in the fourth quartile reported growth rates exceeding 4.7% in 2013, compared with 15% in 2012. Here again, growth was much lower than one year earlier (see Chart 2).

1|2 Major groups continued to globalise

The long-term trend towards stronger international expansion continued in 2013, as foreign markets provided French groups with the growth opportunities they lacked in Europe (see Table 1).

Table 1 Geographical breakdown of turnover

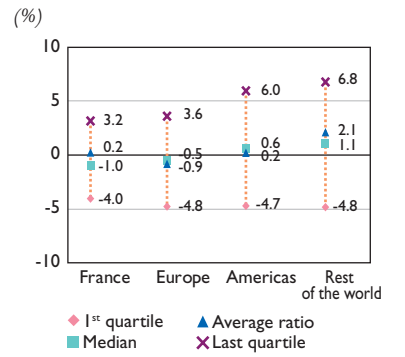
(%)

	31/12/2009	31/12/2010	31/12/2011	31/12/2012	31/12/2013
France	34	33	33	32	29
Europe (excluding France)	33	31	29	29	33
Americas	15	16	17	18	17
Rest of the world	18	20	21	21	21

Key: The reference documents are not completely consistent in terms of the geographical breakdown of activity: at 31 December 2013, 74 of the 77 groups in the sample provided detailed information about the areas above and only 60 mentioned their activity in France.
Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

The share of turnover from the French market shrank by 3 percentage points, as the withdrawal from the domestic market became more marked. According to information released by the 77 groups in our sample at the end of 2013, 29% of their business was conducted on the domestic market, versus 32% the previous year.[2] The major groups primarily redirected their sales to the rest of Europe, while business in the Americas and the rest of the world was virtually unchanged between 2012 and 2013.

Chart 3
Geographical breakdown of turnover growth in 2013



Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

The medium-term trend consists in doing business in increasingly distant markets, as shown by the larger proportion of sales on the US market and in the rest of the world (primarily Asia and Africa). Overall, sales in Europe, including France, accounted for only 62% of total turnover in 2013, compared with 67% in 2009.

However, turnover growth rates confirm that sales declined in 2013 (see Chart 3). Comparing average turnover growth rates for 2013 with data from the previous year shows that the average growth rate of earnings generated in the Americas, at 0.2% in 2013, was still much lower than the 2012 figure of 14%. Sales in the rest of the world grew by a stronger 2.1%, but slightly lower than the 3.0% recorded in 2012. This underlines the role of distant markets as growth drivers: in the Americas, as in the "rest of the world", one quarter of the companies posted turnover growth of around 6% or more. This is a high rate, particularly compared with those in Europe.

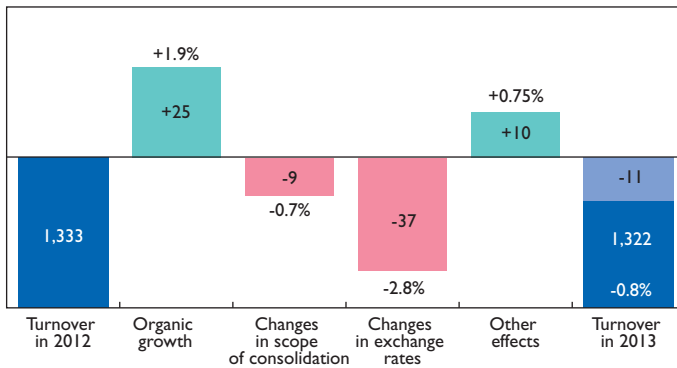
1|3 Greater exposure to exchange rate risk

The groups' international profile means that their business is affected by exchange rates. The translation of certain foreign subsidiaries' financial statements into euro automatically affects the groups' turnover figures and how they change over time. The impact of exchange rates is proportional to the share of sales volume denominated in foreign currencies.

2 *In nominal terms, the turnover of major French groups increased by 13% between 2009 and 2013. It was stable on the whole between 2012 and 2013.*

Chart 4 Breakdown of turnover of the 77 largest groups in 2013

(amounts in EUR billions, changes in %)



Key: The other effects include increases in commodity prices, regulatory changes and deconsolidation that is not attributable to changes in the scope of consolidation.
Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

Whereas in 2012 French companies benefited from positive exchange rate effects, their impact was very negative in 2013, reducing euro-denominated turnover by 2.8% (see Chart 4). This impact breaks down into two components. On the one hand, the 4% slide in the dollar against the euro, the 2% fall in the value of sterling against the euro and the 21% dip in the yen against the euro all had a substantial impact on major French groups' turnover translated into euro. On the other hand, emerging countries' currencies weakened and many of these countries are important export markets for French groups.[3] Against the euro, the Brazilian real lost 17%, the Russian rouble 11%, the South African rand 23%, the Argentine peso 28% and the Turkish lira 20%.[4]

These exchange rate swings had a substantial impact on business growth in 2013, explaining much of the decline in turnover between 2012 and 2013. This holds true for all groups to differing degrees, depending on the international scope of their business: the greater the exposure to a country with a sinking currency, the more the company's euro-denominated turnover will be affected. Overall, individual data show an adverse exchange rate effect in 2013, regardless of the sector concerned.

3 *The groups in the sample do not provide specific data on the impact that each currency has on their financial statements.*
4 *The steep fall in the value of emerging countries' currencies is not specific to the euro, however. For example, measured against the dollar, the Brazilian real lost 13%, the Russian rouble 7%, the South African rand 19%, the Argentine peso 25% and the Turkish lira 17%.*

1|4 Consolidation changes had a slightly negative effect

The structure of the 77 groups in our sample, which are large internationally active entities, changes over time. Such changes occur regularly as they acquire and divest subsidiaries. Accordingly, annual turnover is affected by year-to-year changes in the scope of consolidation, reflecting the contribution made by entities entering the consolidation minus the contribution of those exiting it. Most of the groups publish data based on these changes, or else they provide enough information for observers to measure the impact of external growth.

Some 30 groups adopted fairly aggressive external growth policies in 2013, particularly in emerging and growing markets, with the aim of expanding and diversifying their business, as well as achieving synergies. Some of the groups backed up their growth strategies by repositioning or refocusing their business on certain geographical areas or economic sectors. This led some 20 other groups to sell off peripheral assets, thus reducing their scope of consolidation.

In 2013 there were many major deals involving sales and purchases of companies in all sectors. External growth was particularly dynamic in the trade sector and, to a lesser extent, in manufacturing and services. Conversely, the energy and environment sector, and the information and communication sector saw major asset sales during the year. In contrast to 2012, when consolidation changes had a slightly positive impact, the overall effect in 2013 was negative and equivalent to 0.7 percentage points of turnover (see Chart 4).

Stripping out the impact of changes in consolidation and exchange rates, which was negative in both cases, the rate of organic growth for the 77 groups under review stood at 1.9%. Changes during 2013, therefore, were more favourable than it might seem at first glance. However, when price changes are factored in, it becomes clear that volume growth was weak.

1|5 No visible bounce in the first quarter of 2014

The groups' earning reports for the first quarter of 2014 show no signs of an economic recovery. According to the data available at the beginning of May 2014, the turnover of the 77 largest listed groups shrank by 2.3% compared with the end of March 2013. Weaker emerging currencies continued to have a negative impact at the start of 2014. This impact worsened during the first quarter, as geopolitical uncertainty increased in Europe following events in Ukraine.

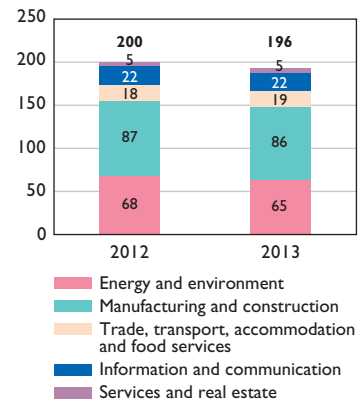
2| Despite large asset write-downs, the groups managed to maintain net profit margins

2|1 A moderate decrease in operating profitability

Operating profitability is estimated using earnings before interest, taxes, depreciation and amortisation (EBITDA), which is calculated as the difference between operating income and operating expenses, before depreciation and amortisation. This balance is similar to the calculation of gross operating surplus used in France. Direct reports of this intermediate balance were provided by 43 of the groups in our sample. We have calculated the balance for the other groups using the intermediate data available in their financial statements.

Chart 5
EBITDA growth by sector for the 77 largest groups in 2013

(EUR billions)



Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

Whereas turnover shrank by EUR 11 billion between 2012 and 2013, the groups' gross earnings dropped by only EUR 4 billion, to EUR 196 billion (see Chart 5). The average contraction was only 2% and had an identical impact in two sectors: manufacturing and construction, and information and communication. The energy sector was harder hit than the average with a 5-percentage-point contraction in earnings. Only two sectors saw significant EBITDA growth of more than 7%: one was trade, transport, accommodation and food services, the other was real estate services and activities.

Operating margins[5] were stable, with a 1-percentage-point rise to an average of 15%, but with wide differences among sectors and groups.

2|2 Operating income fell on asset write-downs

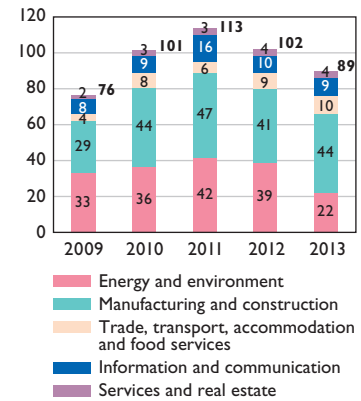
Operating income, i.e. operating income minus operating expenses, measures the intrinsic performance of the groups' businesses, before financial gains/losses and taxes.

5 *Operating margin is the ratio of EBITDA to turnover, which provides a metric for profitability.*

For the 77 groups in our sample, total operating income stood at EUR 89 billion in 2013, down by nearly EUR 13 billion, or down 12%, compared with 2012. This change is proportionately in line with the negative trend seen in 2012, when the annual contraction of operating income stood at 10% (see Chart 6).

Chart 6
Operating income by sector

(EUR billions)



Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

A combination of several factors account for this drop in operating income, starting with larger asset write-downs: a record-breaking EUR 28 billion were taken to operating expenses in 2013, against almost 17 billion in 2012 and EUR 12 billion in 2011. These write-downs correspond to the difference between the net book value of assets on the groups' balance sheets and their estimated fair value based on asset amortisation or impairment tests (see Table 2).

The macroeconomic environment, with lingering uncertainty and an unclear outlook for several world markets, led many groups to book new losses. These write-offs represent major sums for some groups in some or all asset classes. Six groups wrote off more than EUR 1 billion. The sector with the largest write-offs in 2013 was energy and environment, which accounted for more than 60% of the asset impairment losses booked by the groups in our sample.

Table 2 Asset impairment

(amounts in EUR billions, changes in %)

	Total impairment losses			Of which goodwill losses		
	2013	2012	Change	2013	2012	Change
Energy and environment	17.3	5.6	+11.7	6.1	0.6	+5.5
Manufacturing and construction	6.7	7.2	-0.5	1.0	1.5	-0.4
Trade, transport, accommodation and food services	0.8	0.7	+0.1	0.4	0.3	+0.1
Information and communication	3.4	2.9	+0.5	3.1	2.6	+0.5
Services and real estate	0.1	0.1	0.0	0.1	0.1	0.0
Aggregate	**28.3**	**16.6**	**+11.7**	**10.8**	**5.1**	**+5.7**

Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

Under International Financial Reporting Standards (IFRS), asset write-downs are bound to involve a degree of subjectivity, either in terms of the choice of measurement method or the qualitative risk assessment process.[6] Companies generally attribute such losses to the difficult business environment in Europe and its lasting impact on business profits, and to technological reasons, which usually relate to obsolescent facilities and infrastructures.

Since 2012, asset write-downs no longer concern only the goodwill included in the very high prices paid for previously acquired subsidiaries; companies also recognise the impairment of other classes of intangible assets (patents, licences, software) and tangible assets (factories, production units). The extension of goodwill impairment to these new classes of assets seems to indicate concern about the future.[7]

All in all, asset write-downs played a key role in the continuing decline in operating profitability, explaining almost the entire decrease in the groups' operating income. Thus, the operating margin ratio (operating income to turnover) shed another percentage point in 2013, falling to 7%, compared with 8% in 2012 and 9% in 2011.

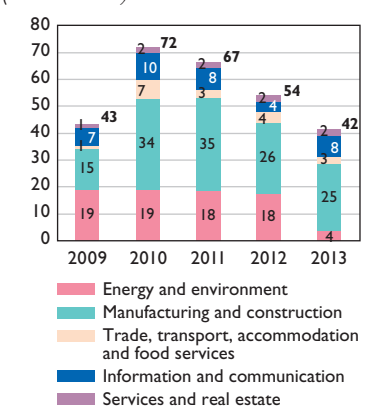
2|3 Net profit fell, but the decline in the net margin ratio slowed down

In 2013 net profit, which is calculated by incorporating financial income and tax expenses into operating income, reflected a decline in the major groups' net profitability for the third year running (see Chart 7). Total net profit fell by 23% in 2013, from EUR 54 billion to EUR 42 billion, after a 19% decrease in 2012.

This decrease can almost entirely be attributed to operating income; other expenses that might affect ultimate profitability have not changed significantly.

Chart 7 Net profit by sector

(EUR billions)



Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

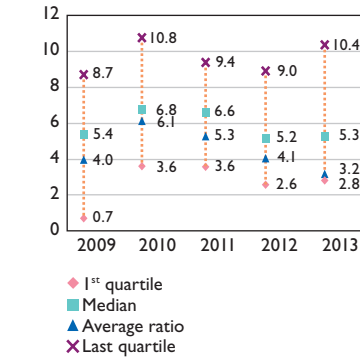
6 *In both cases, practices and interpretations of the standards vary greatly, with some groups even having their own unique approach, sometimes within the same line of business.*

7 *Unlike goodwill, where a loss is irreversible once it has been recognised, impairment losses on other assets may be reversed if the economy improves. This may make groups more likely to recognise such losses.*

With generally equivalent declines in turnover and net income, the average net margin ratio (net profit to turnover) was still positive at 3.2% (see Chart 8). This average ratio was influenced by the poor performance of one large group in the sample. An analysis of the distribution of margin ratios, which is by definition less affected by such a development, shows that the situation was slightly more positive, with an increase in the value of the main distribution parameters, particularly in the third quartile.[8] Despite the difficult business environment, the decline in margin ratios seems to have eased on the whole for the largest listed French companies in 2013. A look at the individual data shows that only 27 of the 77 groups in our sample posted a decline in their net margin ratio in 2013, compared with 44 companies in 2012 and 35 companies in 2011.

Chart 8 Net margin rate

(%)



Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

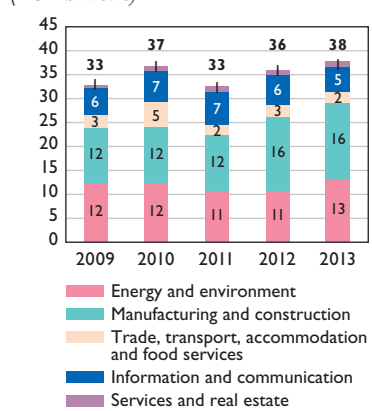
2|4 Dividend payouts increased by 5%

In 2013 the groups in our sample made larger dividend payouts than in 2012. Despite a fall in profits since 2011, non-financial groups listed on Euronext paid their shareholders nearly EUR 38 billion in 2013 (see Chart 9), after recording net profits of EUR 54 billion in 2012. Dividend payouts amounted to EUR 2 billion more than in 2012 (EUR 36 billion, with net profits of EUR 67 billion in 2011). This was the largest payout during the period under review.

The dividend payout ratio measures the share of annual profit paid to shareholders of the parent company

Chart 9 Dividends paid out by the 77 groups

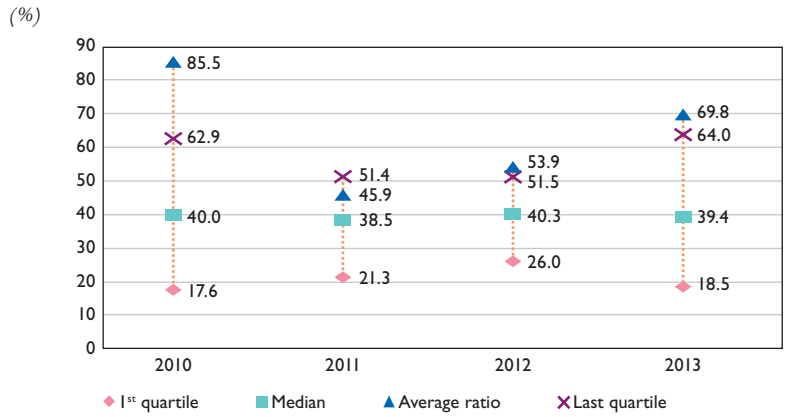
(EUR billions)



Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

8 *I.e. the value of the margin ratio that marks the lower bound of the quartile of the groups with the highest margin ratios.*

Chart 10 Payout ratios



Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

in the form of dividends the following year. This ratio was much higher than the previous year, with the average ratio rising from 54% to 70% (see Chart 10).

Dividend payout policies vary greatly from one group to the next, increasing the differences in situations observed in 2013. The quartile of companies with the lowest payout ratios saw the latter fell from 26% to 18% between 2012 and 2013. At the other end of the spectrum, the quartile of companies with the highest payout ratios increased their average from 52% to 64%.

The groups' dividend payout policies therefore differ significantly and are relatively unstable from one year to the next. Beyond the economic and strategic reasons that lead groups to adapt payouts to their shareholders, dividend policies are nevertheless more stable than long-run profit levels. Average annual dividend payouts between 2008 and 2013 stood at EUR 36 billion, barely less than the amount paid out in 2013.

Lastly, the dividend payout ratio is higher for the 11 groups in which the government holds a significant stake. All 11 had a dividend payout ratio of 90%, compared with 64% for the other 66 groups. Between 2009 and 2013 the payout ratios for these two populations stood at 85% and 56% respectively.

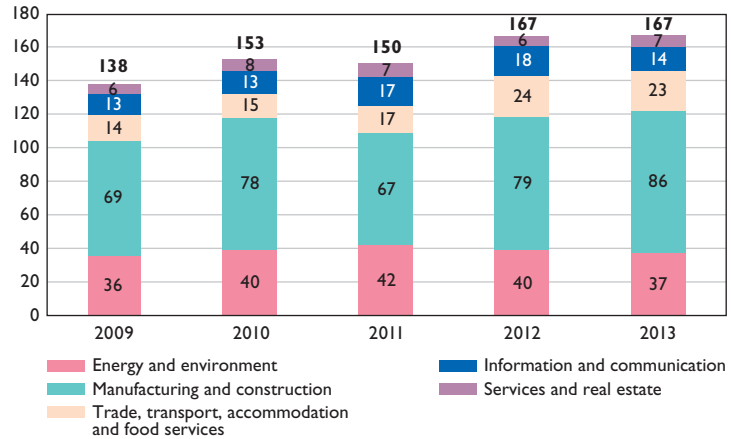
3| Financial structures were sounder while investment was cut back

3|1 Stable overall cash positions

The overall cash positions of the 77 groups were stable in 2013, totalling EUR 167 billion (see Chart 11). An examination of some groups' financial statements shows that they did not generate enough cash surpluses to significantly improve their end-of-year cash positions. However, they still had large amounts of cash on hand, confirming cautious approach currently adopted by major French groups.

Chart 11 Year-end cash position

(EUR billions)

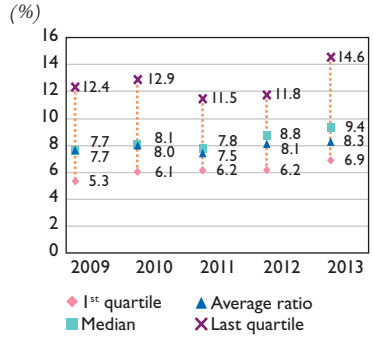


Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

Cash positions accounted for an average of 8.3% of the total assets of the groups in our sample, a slightly larger proportion than in 2012 (see Chart 12). Half of the groups had cash positions that represented more than 9% of their total assets in 2013, and for a quarter of these groups, this figure was even greater than 15%. The major listed groups' cash positions were still equivalent to more than one year of their operating cash flows (see below), which were assessed at a total of EUR 137 billion in 2013.

Chart 12 Year-end cash position to total assets

(%)



Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

Table 3 Cash flows by sector

(EUR billions)

Sector	2009	2010	2011	2012	2013
Trade, transport, accommodation and food services	-1.5	0.0	2.3	7.4	-1.0
Energy and environment	4.6	3.6	2.4	-2.5	-3.7
Manufacturing and construction	23.1	9.6	-11.7	12.5	6.7
Information and communication	0.9	0.1	4.2	1.1	-3.7
Services and real estate	1.0	1.8	-0.5	-1.4	1.4

Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

The breakdown of individual earnings by sector shows varying trends (see Table 3). 2013 data confirm that French manufacturing is the sector that generates the largest volumes of cash, with a total cash flow of some EUR 7 billion. Even though this is less than the EUR 12.5 billion generated in 2012, it is still substantial. In macroeconomic terms, it more than offsets cash losses in the energy and environment sector and in the information and communication sector, assessed at nearly EUR 4 billion in both cases.

At the same time, major listed groups deleveraged to clean up their balance sheets and maintain a sound financial structure (see 3|5). This deleveraging policy is reflected in the following detailed breakdown of cash flow: shrinking operating income, lower investment levels and steady debt repayments are all signs of a wait-and-see attitude.

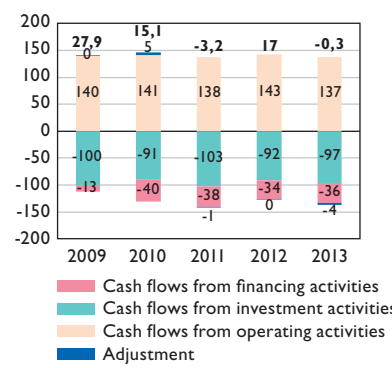
3|2 Operating cash flows declined by 4%

A company's cash flow from operating activities is the difference between its internal financing capacity and changes in its working capital requirement. These flows declined from EUR 143 billion to EUR 137 billion between 2012 and 2013 for the groups in our sample, returning to the level seen in 2011 (see Chart 13).

The operating working capital requirement (OWCR), equivalent to the financing needed for a company's production activity, shrank between 2012 and 2013 (see Table 4).

Chart 13 Cash flows

(EUR billions)



Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

Table 4 Operating working capital requirement formation

(EUR billions)

	2009	2010	2011	2012	2013
Trade receivables (A)	225.7	243.8	260.4	262.0	249.6
Trade payables (B)	196.6	214.7	233.2	236.0	229.4
Balance of trade credit (A – B)	29.1	29.1	27.2	26.0	20.2
Inventories (C)	131.4	140.7	154.5	155.5	153.6
Operating Working Capital Requirement (A – B + C)	160.5	169.9	181.6	181.5	173.8

Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

Overall it stood at EUR 174 billion at 31 December 2013 for the 77 largest listed French groups, compared with EUR 181.5 billion one year earlier.

This shows that French groups continued to adapt their operating conditions to a period of weaker economic growth. More specifically, in 2013, their trade receivables declined by some 5% from EUR 262 billion to EUR 250 billion. Their trade payables decreased to a lesser extent by 3%, meaning that the overall trade credit balance (receivables minus payables) shrank by 22%, from EUR 26 billion to EUR 20 billion. Consequently, listed groups' order books were thinner in 2013, but this did not affect their purchasing. This choice could be seen as a sign that they were expecting growth to pick up again. Inventory levels corroborate this analysis.

All in all, almost every sector benefited from a lower operating working capital requirement, with the sole exceptions of the trade and distribution sector and the information and communication sector (see Table 5).

Table 5 Working capital requirement by sector

(EUR billions)

	2009	2010	2011	2012	2013
Trade, transport, accommodation and food services	-1.5	-1.4	83.0	3.0	2.3
Energy and environment	55.1	56.4	57.8	57.1	51.1
Manufacturing and construction	110.2	118.0	127.3	126.6	124.3
Information and communication	-5.0	-6.0	-6.8	-7.5	-5.9
Services and real estate	1.7	2.8	2.5	2.2	2.1
Total	**160.5**	**170.0**	**181.6**	**181.5**	**173.8**

Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

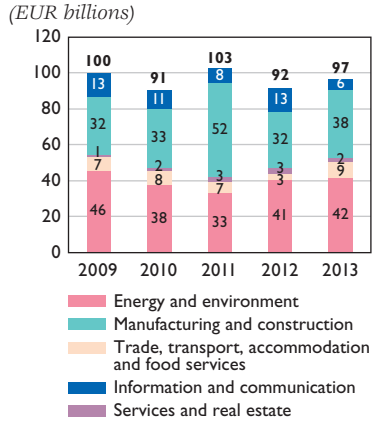
3 | 3 Investment declined despite an increase in equity holdings

Investment flows can be broken down into four main types of operation:

- acquisitions of tangible and intangible fixed assets;
- acquisitions of financial fixed assets;
- disposals of tangible and intangible fixed assets;
- disposals of financial fixed assets.

Chart 14 Net cash outflows for investment

(EUR billions)



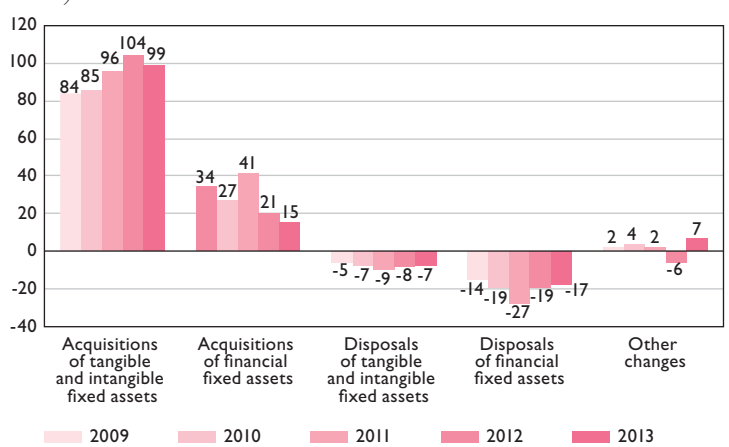
Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

A preliminary breakdown of the overall investment cash flows in 2013 shows larger net outflows than in 2012. The groups in our sample spent EUR 97 billion in cash in 2013, compared with EUR 92 billion in 2012, representing an increase of more than 5%.

A closer look at cash flows, however, shows a decline in investment (see Charts 14 and 15). Indeed, acquisitions of tangible and intangible fixed assets as well as financial fixed assets declined significantly,

Chart 15 Investment flows

(EUR billions)



Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

by EUR 5 billion and EUR 6 billion respectively, whereas disposals fell by just EUR 0.2 billion and EUR 2 billion respectively.

This difference in interpretation stemming from the analysis of overall cash flows and the detailed breakdown of investments and divestments can be attributed to the magnitude of the "Other changes" item in the cash flow table, which records large sums related to consolidation changes. This item increased from EUR –5.7 billion in 2012 to EUR 7.4 billion in 2013. These figures reflect the groups' strategy of increasing their equity holdings in partially-owned subsidiaries. These operations reveal their intention to buttress their financial situation and find a way to increase business and profits through external growth.

3|4 Deleveraging through financing flows

Flows related to financing activities primarily include equity transactions (dividends, share issues and buybacks) and financial debt. These flows have been negative since 2009. They increased by 7% over one year, draining more than EUR 36 billion from the groups' cash pile (see Chart 13 in 3|2).

Several factors explain the net outflows. As we have already seen, dividends paid in 2013 alone amounted to EUR 38 billion in outflows, or an increase of 5%.

According to a study by Standard & Poor's published on 17 March 2014, French companies will have to repay debt equivalent to EUR 470 billion by 2018. This prospect may explain the change in outflows seen this year, heralding the start of a period of deleveraging in which major non-financial corporations make massive repayments of financial debt.

As regards their capital inflows, groups took advantage of easy market access to raise financing on the bond market. These funds were used to finance investments or to restructure debt by repaying bank loans. Bond issues enabled them to obtain better interest rates and longer maturities on their debt. These issues show a sometimes opportunistic refinancing strategy; some groups repaid their existing debts early in order to borrow again immediately.

On the whole, the 2013 balance sheets of the groups under review show total bond debt of EUR 302 billion, i.e. similar to levels in 2012. However, the proportion of bond debt in the total financial debt of the sample groups has increased steadily in the medium and long term, rising from 46% in 2009 to nearly 59% in 2013. The size of this change underscores the groups' interest in the bond market over the past few years.

3|5 Debt ratios were down

For the first time since 2008, the debt ratio of the 77 largest French groups has decreased in annual terms. The amount of financial debt fell by some 5% from EUR 542 billion in 2012 to EUR 515 billion in 2013 (see Chart 16).

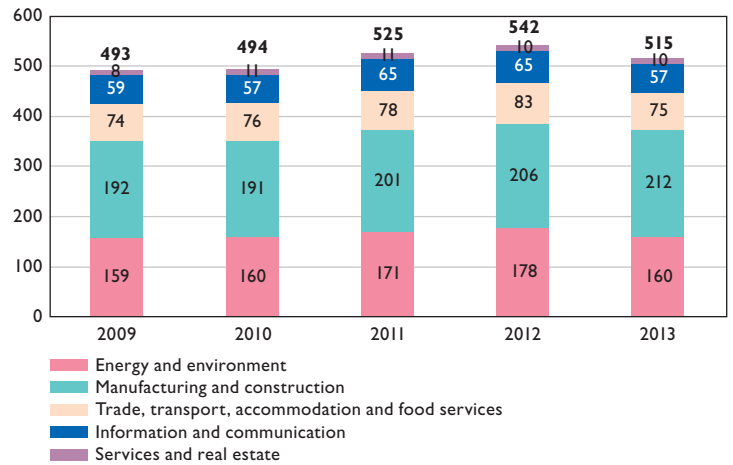
Deleveraging was observed in the energy and environment sector, the trade, transport, accommodation and food services sector, and the information and communication sector. Conversely, the manufacturing sector and the services and real estate sector both continued to accumulate debt.

The overall decrease in the groups' debt may stem in part from the lack of major funding requirements for operations, since their OWCR decreased. At the same time, disposals and business closures allowed the debts taken on by these entities to be removed from the groups' consolidated balance sheets. The scale of changes in the scope of consolidation explains why debt was not affected by the increase in investment flows, while the cash position remained stable.

Comparing debt with equity, which increased by less than 1%, shows a decline in the financial debt ratio between 2012 and 2013 (see Chart 17). On average, the latter fell from 83% to 78%, to very close to its 2010 level. From this point of view, the major groups bolstered their financial structure.

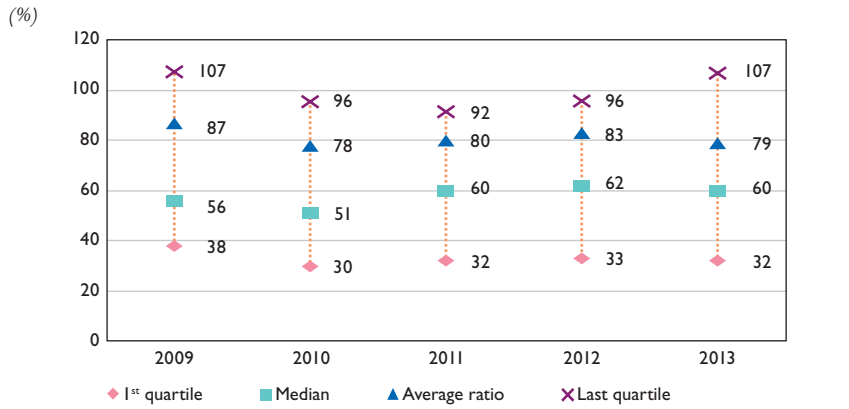
Chart 16 Financial debt by sector

(EUR billions)



Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

Chart 17 Financial debt to equity



Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

The distribution of financial debt ratios naturally shows a wide diversity of situations. The median debt ratio decreased from 62% to 60%, equivalent to its 2011 level. One quarter of the groups, however, had debt ratios lower than 32%, or only half the median ratio. At the other end of the spectrum, the financial debt of the quarter of the groups with the highest debt ratios stood at more than 107% of their equity, representing a sharp increase over the previous year.

The gross debt to gross operating profit ratio, which measures the debt burden against business performance, stood at an average of 2.6 years of activity in 2013, almost the same as in 2012. However, there are major differences between the groups under review. Given the major profitability differentials, some groups have debt equivalent to approximately 10 years' gross operating profit, while for others, the figure is less than one year.

4| "Other comprehensive income – OCI" dampened equity growth

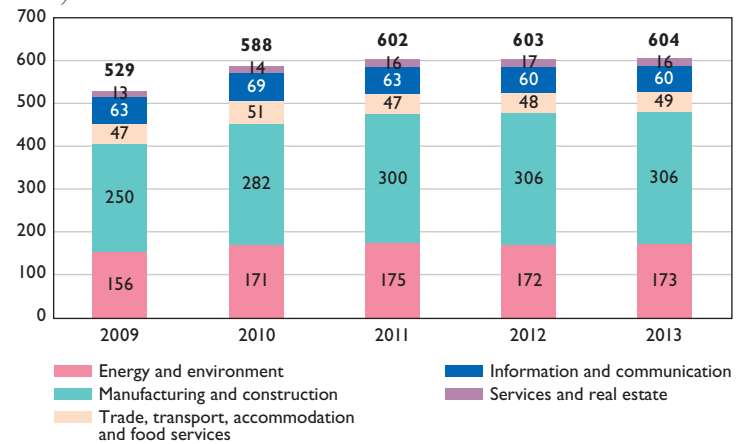
4|1 A small rise in equity, and wider disparities

At the end of 2013, equity stood at EUR 604 billion (see Chart 18). The increase over 2012 was tiny, at less than 1%, and was in line with the trend in previous years.

Shrinking income, increased dividend payouts and the negative impact of OCI have been recurring factors in recent years. Once again, they explain the weak growth of equity in 2013. Foreign currency translation adjustments, which have increased exponentially, played a major role in the drop in OCI.

Chart 18 Equity – group share

(EUR billions)



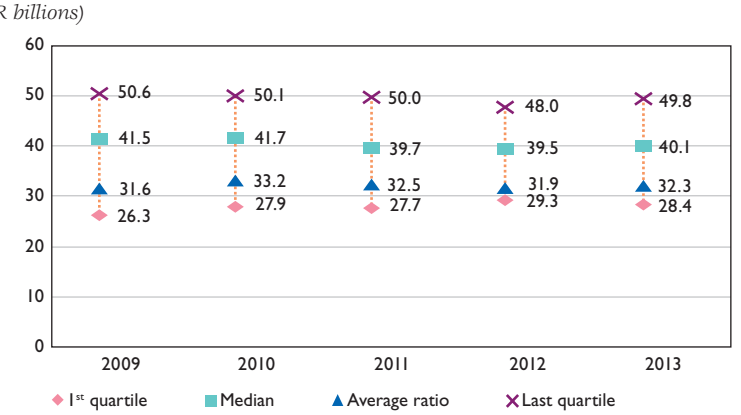
Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

The total equity of the groups in our sample stood at EUR 604 billion in 2013, compared with EUR 602 billion in 2011 and EUR 603 billion in 2012 (see Chart 18). Including minority interests, the figure rose to EUR 651 billion, or 32% of total assets. Minority interests fell for the first time in five years. The fall was fairly sharp, at nearly 10%, and stems from changes in the scope of consolidation of some major groups that have shed subsidiaries.

The distribution of equity shows larger disparities (see Chart 19). One quarter of the companies have ratios of 50% or more, compared with 48% in 2012, while another quarter have ratios of 28% or less, compared with 29% in 2012. The median amount was, logically, stable at around 40%.

Chart 19 Equity to total assets

(EUR billions)



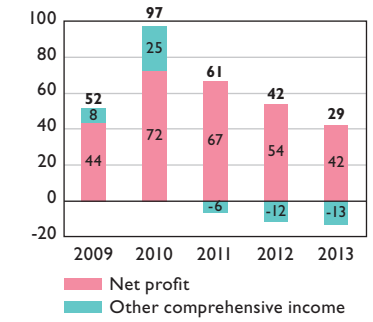
Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

4|2 The weight of OCI

One of the specific features of IFRS-compliant consolidated accounts relates to the OCI item. The income and expense entries under this item are not included in the calculation of net profit and have no impact on the cash position. They are posted directly to equity and can alter it substantially. Since the end of 2008, groups have been required to report on these entries in a summary "Statement of comprehensive income".

Chart 20 Net profit and comprehensive income

(EUR billions)



Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

In 2013 the comprehensive income of the 77 listed groups stood at EUR 29 billion, or a 31%-decline in net profit. The OCI items are very volatile, both in terms of the amounts recorded by individual entities from one year to the next and in terms of the nature of the operations that generate them. However, the aggregate amount seems to be fairly stable compared with previous years (see Chart 20).

The overall impact on net profit is negative, at EUR 13 billion, compared with EUR 12 billion in 2012. This impact is even greater in relative terms, since net profit declined in 2013. As a result, OCI represented nearly one third or 31% of net profit in 2013, compared with 22% in 2012.

The components of OCI were particularly disparate in 2013 (see Chart 21). The largest component was foreign currency translation adjustments, i.e. the losses and gains generated when translating foreign subsidiaries' foreign currency financial statements into euro. In 2013 this loss was more than four times greater than at the end of 2012, at EUR 27 billion, compared with a loss of EUR 6 billion, due to changes in the euro's exchange rate against other currencies in 2013.[9]

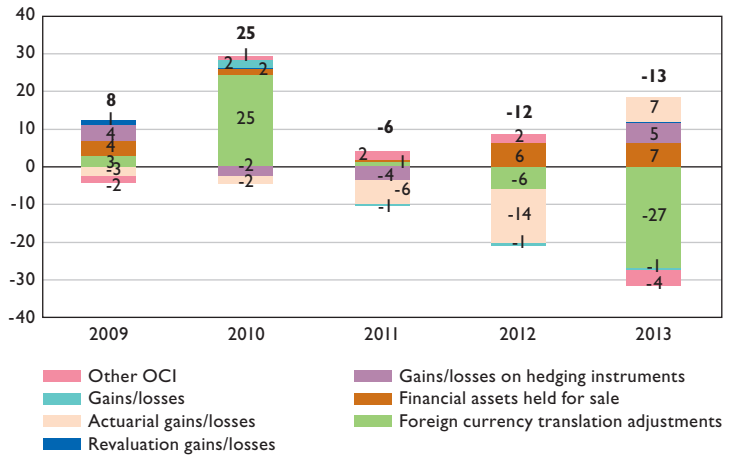
The other large component of OCI in 2013 was actuarial gains and losses. These are the result of the actuarial calculations made when adjusting provisions for pension liabilities. This component went from a loss of EUR 14 billion in 2012 to a gain of EUR 7 billion in 2013, partially offsetting foreign currency translation adjustments. This major change is the result of the amendment of IAS 19, which imposes a single method for recognising pension provisions since 1 January 2013.[10]

9 The negative currency impact on equity mainly results from the fact that subsidiaries' assets and liabilities are converted using the exchange rate at the date of closure of the financial statements. As at 31 December 2013, the euro had risen against nearly all other currencies, leading to a sharp increase in currency losses and hence a decline in equity.

10 The amendment to IAS 19 eliminated the corridor method, which allowed companies to recognise only a fraction of the actuarial gains and losses. As of 1 January 2013, all actuarial gains and losses must be posted directly to other comprehensive income.

Chart 21 Breakdown of OCI

(EUR billions)



Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014.

4|3 Goodwill represented a large share of equity

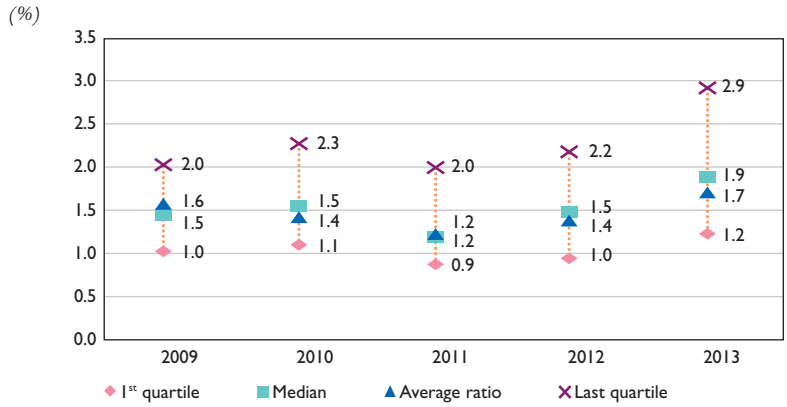
At 31 December 2013, net goodwill accounted for nearly EUR 300 billion or 46% of the major groups' equity. This is smaller than the figure of nearly 49% in 2012. Goodwill impairment losses doubled in 2013 to EUR 11 billion.

There were a number of major financial operations in 2012 that led to recognition of many goodwill impairment losses. More such losses are expected in 2014. Consequently, the value of equity holdings in some companies fell sharply. The total goodwill impairment ratio worsened, rising from 9% in 2012 to 12% in 2013. This trend was especially noticeable in the energy and environment sector and in the information and communication sector.

4|4 Market capitalisations have increased steadily

Even though business and earnings have shrunk, the market capitalisation of the groups in our sample has risen steadily since 2011, posting an even stronger rise in 2013. Thanks to the steady gains observed on equity markets since the middle of 2012, the total capitalisation of the 77 groups rose by 22% to reach EUR 1,117 billion at the end of 2013. This shows that the market has confidence in French companies and still expects a post-crisis financial recovery.

Chart 22 Price to book ratio



Sources: Financial statements of the 77 groups, calculations by Banque de France, May 2014, NYSE Euronext.

A more detailed look at the price-to-book ratio (market value compared with book value) shows that the median ratio has risen by nearly 27%, from 1.5 to 1.9 between 2012 and 2013 (see Chart 22). In our sample, 36 of the 77 groups have a ratio greater than 2 (as opposed to 27 groups one year earlier) and a quarter of the groups have a very high ratio of 2.9 or more. On the other hand, only eight groups have a ratio smaller than 0.8, compared with 12 groups in 2012.

Appendix

1 | Methodology

The study sample includes non-financial groups listed on the Paris market with accounting periods ending on 31 December 2013. The groups are listed on segment A of Euronext for entities with market capitalisations greater than EUR 1 billion. There are 77 groups in the sample. These groups are estimated to account for 85% of the turnover of all listed companies in France, and 60% of the turnover of all French groups producing consolidated financial statements. The study looks at the annual financial statements for 2009 to 2013 and the groups are broken down into the following sectors:

Groups in sample

Energy and environment	AREVA, EDF, GDF-SUEZ, MAUREL ET PROM, SUEZ ENVIRONNEMENT, TOTAL, VEOLIA ENVIRONNEMENT
Manufacturing and construction	AIRBUS GROUP (ex-EADS), AIR LIQUIDE, ALCATEL, ARKEMA, BIC, BIOMÉRIEUX, BOUYGUES, CIMENTS FRANÇAIS, DANONE, DASSAULT AVIATION, ERAMET, ESSILOR, EUROFINS, GROUPE BEL, HERMÈS, IMERYS, INGENICO, IPSEN, LEGRAND, L'ORÉAL, LAFARGE, LVMH, MICHELIN, NEXANS, PEUGEOT SA, PLASTIC OMNIUM, RENAULT, SAFRAN, SARTORIUS, SEB, SAINT-GOBAIN, SANOFI AVENTIS, SCHNEIDER, THALES, VALEO, VALLOUREC, VICAT, VINCI, VIRBAC
Trade, transport, accommodation and food services	ACCOR, ADP, AIR FRANCE-KLM, BOLLORE, CARREFOUR, CFAO, EIFFAGE, EUROTUNNEL, KERING (ex-PPR), ORPEA, RALLYE, REXEL, RUBIS
Information and communication	ATOS ORIGIN, CAP GEMINI, DASSAULT SYSTÈMES, ORANGE, GEMALTO, ILIAD, IPSOS, LAGARDÈRE, MÉTROPOLE TV, VIVENDI
Services and real estate	BOURBON, BUREAU VERITAS, EDENRED, HAVAS [1], JC DECAUX, NEXITY, PUBLICIS, TECHNIP, TÉLÉPERFORMANCE

Groups excluded from sample

Financial statements in USD	ARCELORMITTAL, CGG VERITAS, SCHLUMBERGER, STMICROELECTRONICS
Financial institutions and similar entities	AXA, BNP PARIBAS, CIC, CNP, CRÉDIT AGRICOLE, EULER HERMÈS, EURAZEO, NATIXIS, NYSE EURONEXT, SCOR SE, SOCIÉTÉ GÉNÉRALE
Groups with financial years that do not end on 31 December	ALSTOM, EUTELSAT COMMUNICATIONS, NEOPOST, PERNOD RICARD, RÉMY COINTREAU, SODEXO, VILMORIN & CIE, ZODIAC AEROSPACE
Property companies	ALTAREA, FDL, FONCIÈRE DES MURS, FONCIÈRE DES RÉGIONS, FONCIÈRE LYONNAISE, GECINA NOM., ICADE, KLÉPIERRE, MERCIALYS, SILIC, UNIBAIL-RODAMCO
Groups consolidated by another group or investment fund	APRR, CAMBODGE NOM., CASINO GUICHARD, CHRISTIAN DIOR, COLAS, FAURECIA, FINANCIÈRE DE L'ODET, HAVAS (since 2013), PARIS ORLÉANS, TF1, WENDEL

1 Havas, which was in our sample from 2009 to 2012, has been consolidated by Bolloré since 2013. Our sample for 2013 contains 77 groups.

2 | Data analysed

The main items analysed for the 77 groups in the 2013 sample:

I. GENERAL INFORMATION
Company name
SIREN number
NACE code for the principal activity
II. INCOME STATEMENT
Turnover *o/w turnover in France* *o/w turnover by geographical area (Europe, Americas, rest of the world)*
EBITDA
Operating income
Current operating income
Net income
III. COMPREHENSIVE INCOME
Foreign currency translation adjustments
Gains/losses on financial assets held for sale
Gains/losses on cash flow hedges
Changes in revaluation surplus
Actuarial gains/losses
Gains/losses posted directly to equity of companies consolidated by the equity method
Other
Comprehensive income
IV. BALANCE SHEET
Goodwill – gross value
Goodwill – net value
Other intangible fixed assets
Tangible fixed assets
Inventories
Trade receivables
Total current and non-current assets
Total financial debt *o/w bond debt*
Minority interests
Equity
Trade payables
Total current and non-current liabilities

V. CHANGES IN EQUITY
Change in issued share capital
Dividends paid out (group share + minority share)
Currency translation gain/loss
Gains/losses on financial instruments
Gains/losses on other assets
Actuarial gains/losses
Companies consolidated by the equity method
VI. CASH FLOW
Cash flow from operating activities
Cash flow from investment activities: • acquisitions of tangible and intangible fixed assets • acquisitions of financial fixed assets • disposals of tangible and intangible fixed assets • disposals of financial fixed assets • other changes
Cash flows from financing activities
Change in net cash position
Year-end net cash position
Market capitalisation at 31/12/2013

References

Alcaraz (M.) (2014)

"*Les entreprises françaises se ruent sur le marché de la dette*", *Les Échos*, 28 January

"*À quoi servent les profits des ténors de la cote ?*", *Les Échos*, 7 March

"*Les entreprises du CAC 40 cumulent près de 50 milliards d'euros de bénéfices*", *Les Échos*, 7 March

Besses-Boumard (P.) (2014)

"*Les fleurons du CAC 40 s'attellent enfin aux dépréciations d'actifs*", *Wansquare*, 28 February

Bing (P. Y.) (2014)

"*Les dividendes des actions françaises sont-ils si indécents ?*", *Option Finances*, 31 March

Breiman (M.) (2014)

"*Les Trimestriels soutiennent le marché*", *Investir, le journal des finances*, 26 April

Cette (G.) and Sylvain (A.) (2014)

"*Situation financière des entreprises : la France décroche*", *Problèmes économiques*, 1 March

Fay (P.) (2014)

"*Le nettoyage des comptes s'est poursuivi* », *Les Échos*, 7 March

Lefebvre (A.) (2014)

"*Marché obligataire – les émetteurs allongent leurs maturités d'emprunt*", *Option Finance*, 14 April

Lejoux (C.) (2013)

"*Fusions-acquisitions : c'est reparti !*", *La Tribune*, 4 October

Leloup (L.) (2014)

"*Fusions-acquisitions des groupes industriels français en 2014*", *Finyear*, 10 February

Pelé (D.) (2014)

"*Attentisme malgré de bons résultats*", Challenges, 13 March

Simon (J.-C.) (2013)

"*La France, victime de ses groupes mondiaux*", *La Tribune*, 4 October

Standard & Poor's (2014)

"*Les entreprises européennes rembourseront l'équivalent de 1 600 milliards de dollars de dettes d'ici à 2018*", *La lettre du trésorier*, April 2014

Labour productivity in Europe: allocative efficiency of labour or performance of firms?

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Microeconomic and Structural Research Directorate

This paper examines the impact of allocative efficiency of labour in firms and of individual firm performance on labour productivity at sector level for several European countries. It uses data recently collected by the Competitiveness Research Network (CompNet) from various individual national data sources. Very high heterogeneity in firm productivity is observed within sectors, which suggests that the allocative efficiency of labour, differentiated at firm level, may be a key determinant of aggregate productivity. The decomposition of aggregate productivity by sector according to the method developed by Olley & Pakes (1996) shows that in major European economies labour is attracted to the most productive businesses, which contributes to aggregate productivity growth. However, cross-country differences in productivity in Europe, as well as sector-level productivity trends, are mostly explained by the individual performance of firms (average productivity). During the 2000s, substantial reallocation effects were observed in sectors which are subject to significant demand shocks or marked increases in competition.

Key words: productivity, allocative efficiency, international comparisons

JEL codes: L11, L25, 057

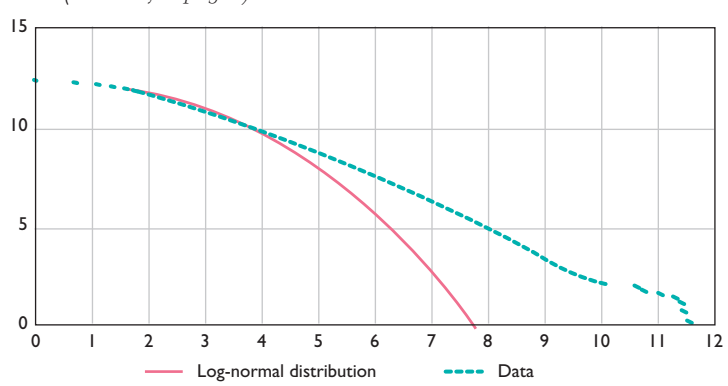
NB: The authors: Antoine Berthou (DGEI/DEMS/SEC2E) and Charlotte Sandoz, who was an intern at the Banque de France when this paper was written. *All data were produced at sector-level by the country teams of the Competitiveness Research Network (CompNet) during the year 2013. They were then centralised at the European Central Bank under the particular supervision of Filippo di Mauro and Paloma Lopez-Garcia who coordinated this data collection exercise and then circulated the data. This paper does not necessarily reflect the views of the Banque de France and the Eurosystem.*

International productivity comparisons are generally carried out with indicators calculated using statistical data aggregated on a country-by-country basis. Sometimes, however, they are detailed on a sector-by-sector basis. This is the case with EU KLEMS consortium data, for example, or the Organisation for Economic Cooperation and Development (OECD) STAN data, which include measures of value added, employment or pricing across several countries. These data provide measures for labour productivity, thus evaluating the contribution of firm-level activity within sectors and the reallocation of labour between sectors, viewed in terms of the dynamics and levels of aggregate productivity. The allocative efficiency of labour or capital between firms in the same sector cannot be assessed with these data, however, and yet, given the extreme heterogeneity of firm size and productivity, the contribution of reallocations to aggregate productivity cannot be excluded.

Chart 1 shows the empirical size distribution of French firms in 2005 and confirms the stylised fact demonstrated by Luttmer (2007) for the United States. This empirical distribution (in green) differs from the predictions of the log-normal estimate of French firms in 2005[1] (in pink), confirming that labour is distributed heterogeneously across firms. A large proportion of labour is employed in a few very big firms while a very large number of small firms coexist, often within the same sector. The high density of very large firms within economies is illustrated by the fat-tailed distribution of firm sizes and implies that idiosyncratic shocks[2] affecting large firms

Chart 1 Size distribution of French firms in 2005

Y axis: ln (number of firms to the right of s);
X axis: s = ln (number of employees)



Note: Balance-sheet data for firms for the whole economy in 2005.
Source: Bénéfices réels normaux *(BRN - Standard tax regime based on profits) database,* Institut national de la statistique et des études économiques *(Insee - French National Institute of Statistics and Economic Studies).*

1 *Maximum likelihood estimate of log-normal distribution of French firms in the BRN database (database of French firms with a turnover above a certain threshold and which are subject to the standard tax regime based on actual profits) in 2005.This estimate makes it possible to reproduce quite precisely the observed size distribution of firms by number of employees (firms employing up to around 150 employees). For larger firms, the prediction is less precise, particularly for very large firms for which the log-normal distribution density is much lower than the observed density.*
2 *An idiosyncratic shock is a shock to an individual firm.*

at a microeconomic level have a significant impact on macroeconomic variables measured for the economy as a whole (Gabaix, 2011).

There is also a very significant heterogeneity of firm sizes within sectors, which reflects different types of frictions. These in turn reflect the nature of sectors themselves (scale-based productivity, product differentiation, idiosyncratic shocks affecting firms, etc.) or other types of distortions (credit constraints, barriers to firm entry, grants, corruption, etc.). The latter affect the size and productivity of firms and thus have an impact on the allocative efficiency of labour and capital between firms. More efficient allocation can only come about where the highest-performing firms are increasingly able to attract production factors. Thus, where there is a substantial level of heterogeneity in the productivity of firms, allocative efficiency within sectors determines the level (and dynamics) of aggregate productivity.

This realisation led the Competitiveness Research Network (CompNet), a network for the national central banks in the European System of Central Banks (ESCB), to create a new database. The added value of this database lies in the fact that it gives not just averages but dispersion and several distribution points by sector and by year for a large number of indicators such as the productivity, employment and capital intensity of firms. A full description of the database and the methodologies used can be found in a European Central Bank working paper (CompNet task force, 2014).

This paper aims to produce the first series of European productivity comparisons using data from the CompNet database. First of all, we aim to evaluate the extent of productivity dispersions between firms within each sector across several European countries. We focus primarily on France, Spain and Belgium, as the data for these three countries are more readily available. We also provide the results of our analysis for Germany and Italy, but these findings should be treated with caution given the fact that the samples of firms used to calculate the indicators for these two countries are less representative. In the second part of the paper we provide a decomposition of aggregate productivity based on the methodology developed by Olley and Pakes (1996), which measures the contribution of the average performance of firms and the allocative efficiency of labour between firms in terms of sector-level productivity each year.

The results confirm the very high dispersion of productivity levels between firms within European economies. In France, firms which achieve ninth decile performance in terms of levels of productivity (the most productive 10% of firms) are on average three times more productive than firms in the first decile (the least productive 10% of firms). Comparable productivity dispersion is found in Belgium and Spain. The highly heterogeneous nature of firm productivity exceeds that found for the United States in Syverson's study (2004), but is lower than that shown for India and China

in the study carried out by Hsieh and Klenow (2009). This reinforces the idea that higher allocative efficiency of labour and capital would open the way to substantial productivity gains.

Using the Olley and Pakes decomposition (1996), our analysis confirms that allocative efficiency of labour is a key determinant in driving within-sector productivity levels. Labour is attracted to the most productive businesses in France, Belgium and Spain. However, changes in levels of aggregate productivity over time result primarily from developments in the average productivity of firms, while in all these countries, the effects of reallocation between firms only contribute slightly to these changes. In fact, this last observation masks a more marked trend during the 2000s in the "allocative efficiency" of labour indicators in sectors affected by significant demand shocks or by increased competition. A more systematic analysis based on econometric methods is, however, required in order to establish a causal relationship between productivity trends and increased competition or demand. Research studies currently underway will test these relationships using CompNet data.

1| A proliferation of academic studies on the effects of reallocation

This paper references a wide body of theoretical and empirical literature published over the last two decades. This research has highlighted the role of firm-level adjustments in shaping aggregate productivity levels and growth where there are heterogeneous distributions of firm size and productivity. Theoretical models such as the Melitz model (2003) have provided a framework for examining the role of within-sector reallocation of market share based on the firm heterogeneity hypothesis. More recent papers (Restuccia and Rogerson, 2008; Hsieh and Klenow, 2009; Alfaro, Charlton and Kanczuk, 2008; Midrigan and Xu, 2010; Bartelsman, Haltiwanger and Scarpetta, 2013) have emphasised the role of the allocative efficiency of resources (i.e. of labour) across firms in driving aggregate performance where heterogeneous levels of firm productivity exist. This process of reallocation of resources across firms can, in fact, bring about significant gains in aggregate productivity in the presence of external shocks such as a trade liberalisation episode (Pavcnik, 2002; Bernard *et al.*, 2011; Verhoogen, 2008). Here, we follow the methodology of sector-level aggregate productivity decomposition proposed by Olley and Pakes (1996). A limitation of this decomposition is that it does not take account of firm selection over time – firms' entry and exit is a potentially key factor in sector productivity trends.[3] The choice of

3 *The entry of more productive firms to the detriment of less productive ones can have an impact on a sector's level of productivity. This can, for example, take place when a sector is opened up to competition. See Melitz and Polanec (2012) for a full review and a discussion of the methodologies used in the published research to provide a decomposition of aggregate productivity.*

this decomposition in our study was nonetheless motivated by the nature of the database, which does not contain sufficiently detailed information on the distribution of firms, meaning that measures of the contribution of firm entry and exit are limited.

Building on Grossman and Helpman (1991), various papers have also emphasised the role of innovation and demand which, taken together, can explain within-firm productivity gains. By focusing on trade liberalisation, Constantini and Melitz (2008), Atkeson and Burstein (2010), and Burstein and Melitz (2013) have provided theoretical evidence that innovation (and productivity) can be affected by market size and the degree of trade liberalisation. Bustos (2011), and Lileeva and Trefler (2010) offer empirical evidence of these factors through natural experiments in trade liberalisation, and Aw *et al.* (2011) propose a structural model estimate. The stylised facts obtained using our cross-country samples tend to confirm these findings, as most of the changes in aggregate productivity are explained by changes in within-firm performance rather than by a reallocation process.

2| The CompNet database

The findings presented in the rest of the paper were obtained using data from the CompNet database, which lists competitiveness indicators for 11 countries and 58 sectors over the period 1995-2011(defined at 2-digit NACE level). Each cell of the database corresponds to a sector-level indicator for turnover, value added, employment, intermediate consumption, total assets, labour productivity and total factor productivity estimated using the Wooldridge (2009) and Levinsohn and Petrin (2003) methodology. The indicators do not simply provide the average and median for each variable but also cover all moments of the distribution (variance, skewness, kurtosis, decile shares). The methodology used shows the within-sector distribution of values for each variable, which represents a considerable addition to the statistics that are generally available and allows for improved identification of performance dynamics within each sector. Indeed, we will see that from the point of view of productivity, there is no such thing as a "representative firm" for a given sector, implying that average productivity masks very high heterogeneity in terms of both performance levels and dynamics.

In accordance with the methodology developed by Olley and Pakes (1996), indicators measuring the allocative efficiency of labour across firms are used in addition to these sector-level indicators of averages and dispersion calculated for each database variable. This decomposition of aggregate productivity allows the contribution of average firm performance and allocation of labour between firms to be identified for each sector and year.

Table 1 Coverage of source samples for the computation of CompNet database sector-level indicators

(in numbers, coverage in %)

	Number of firms	Coverage in proportion to the number of firms	Coverage in proportion to total employment	Coverage in proportion to total turnover
France	348,179	26	84	99
Spain	245,121	24	42	58
Belgium	66,842	33	73	86
Italy	53,054	2	17	22
Germany	30,688	2	38	66

Note: The differences in coverage of samples are explained by the under-representation of some firms (for example in France very small firms have very little representation in the BRN database) or by the data that are missing for some variables when the firm is included in the sample.
Source: CompNet task force (2014).

All the indicators were calculated from individual databases of firms for each country in the European CompNet network. A single protocol was circulated to each national team (composed of central banks and national statistical institutes) to ensure that cross-country data management was harmonised and that national confidentiality rules were respected and no individual firm-level data were published.

These national inputs give greater coverage than other multi-country databases for firms, such as the Amadeus database (Bureau Van Dijk). However, there is still some heterogeneity in the samples used to calculate the sector-level indicators, which means that a great deal of care must be taken in interpreting the results. Table 1 shows that out of the major European economies participating in the CompNet exercise, France, Belgium and Spain have more representative samples of the population as a whole than Germany and Italy. This is why in this paper we focus on the results for these three European economies.[4] The database as a whole, along with a few results, is presented in the paper produced by the members of the CompNet task force (CompNet Task Force, 2014).

3| Labour productivity distribution

The first series of results focuses on within-sector productivity dispersion comparisons. For each sector we use one piece of productivity data for several percentiles in the distribution: the first percentile, the first decile, the first quartile, the median, the third quartile, the last decile and the last percentile. These indicators are aggregated for the whole of the economy and then productivity levels are given for four years (1997, 2000, 2005 and 2007).[5]

4 *Even for these three countries, the results must be considered with caution because, as shown in Table 1, the coverage rate of samples is not entirely homogenous from one country to another and varies according to type of variable (number of firms, labour, turnover).*
5 *Aggregates are computed by weighting each sector-level observation by the sector's share of the total value added for the whole economy.*

The results in Charts 2 show that, for France, very high productivity heterogeneity exists both in services and manufacturing. Firms which achieve ninth decile performance in terms of levels of productivity (the most productive 10% of firms) are, on average for the economy as a whole, three times more productive than firms in the first decile (the least productive 10% of firms). The highly heterogeneous nature of the productivity of firms exceeds that found for the United States where firms in the last decile are on average twice as productive as firms in the first decile (Syverson, 2004). Even higher differences in productivity are found in India and China, where firms in the last decile are five times as productive as firms in the first decile (Hsieh and Klenow, 2009).

There is also very high productivity dispersion across firms in the other major European economies (see Chart 3). In Belgium and Spain, the firms in the last decile[6] of the productivity distribution are on average 2.7 and 4 times more productive respectively than firms in the first decile. There is a lower dispersion in Germany, though this is at least partially explained by the fact that small and medium enterprises (SMEs)/microbusinesses are under-represented in the sample of firms.

In countries with more representative samples, other statistical biases may, in part, explain these very large within-sector productivity variations. Where, for example, sectors have been too widely defined (here sectors are defined at the 2-digit NACE level, giving us 58 sectors), the heterogeneity of productivity performance across firms could result from the fact that businesses are in fact involved in very different activities. Financial operations between same-sector firms may also introduce heterogeneity arbitrarily, but the database does not allow us to isolate groups of individual firms. In spite of these biases, high within-sector productivity dispersion suggests that significant gains can be expected from a better allocation of production factors (favouring the reallocation of capital and labour to the most productive firms in each sector).

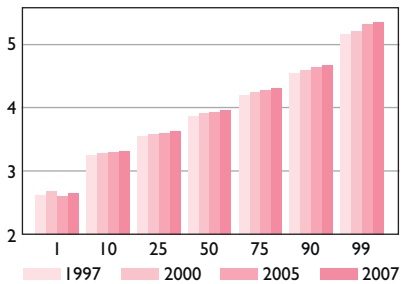
Moreover, the descriptive statistics reproduced in Charts 2 and 3 seem to show that the labour productivity distribution is not constant over time (see also Charts A1 and A2 in the appendix). In France and Spain, in particular (but also in Germany), labour productivity growth for the period 2001-2007[7] has been fastest among businesses at the top end of the productivity distribution. Productivity distribution for French firms has therefore changed over time, with a higher concentration of productivity gains among the highest performing firms.[8] This is thus a non-stationary distribution, and additional research would be required to determine the mechanisms which have led to this finding[9] (better access to new technologies for the most productive firms, etc.).

6 *In spite of the high coverage in terms of firms, the low coverage of Spanish data when it comes to labour and turnover suggests that some big firms are missing from the source data.*
7 *The period 2001-2007 is the period covered by the data for the five economies studied in this paper.*
8 *This finding is confirmed by Chevalier, Lecat and Oulton (2008).*
9 *The descriptive statistics do not at this stage allow us to determine if this finding results from increased productivity growth among firms initially classified as very productive or if this growth corresponds to firms that were initially less productive but have become more so.*

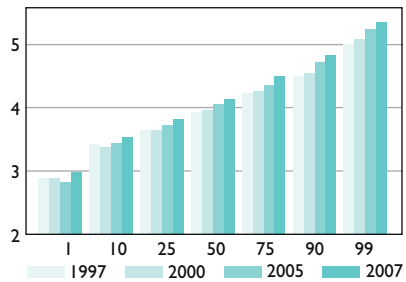
Charts 2 Labour productivity distribution in France: (services and construction versus manufacturing)

(in logs)

a) Services and construction



b) Manufacturing

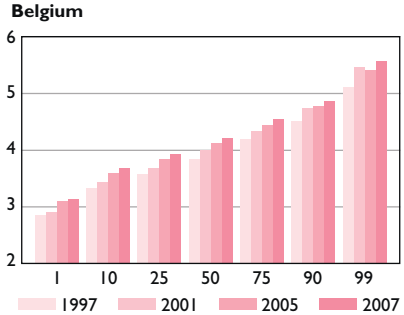


Note: Sector-level indicators are aggregated taking into account each sector's share of the total value added. The figures on the x axis correspond to the percentiles of the distribution (1 for the first percentile, 25 for the first quartile, 50 for the median, etc.). The values on the y axis correspond to the productivity logarithm.
Sources: CompNet micro database and authors' calculations.

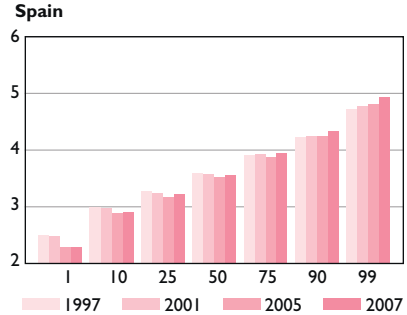
Charts 3 Labour productivity distribution at firm level in the manufacturing sector in Europe

(in logs)

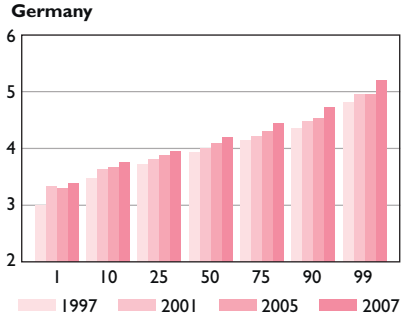
Belgium



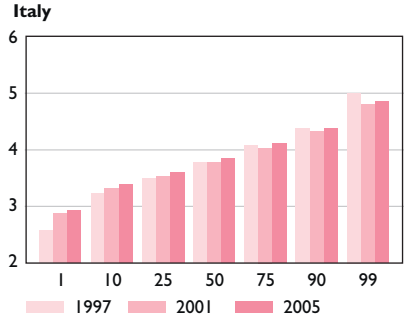
Spain



Germany



Italy



Note: Sector-level indicators are aggregated taking into account each sector's share of the total value added. The figures on the x axis correspond to the percentiles of the distribution (1 for the first percentile, 25 for the first quartile, 50 for the median, etc.). The values on the y axis correspond to the productivity logarithm.
Sources: CompNet micro database and authors' calculations.

4| A decomposition of aggregate productivity: performance of firms or allocative efficiency?

The findings relating to firm-level productivity dispersion show substantial within-sector heterogeneity, which suggests that the allocative efficiency of labour across firms is a key determinant in aggregate productivity levels.

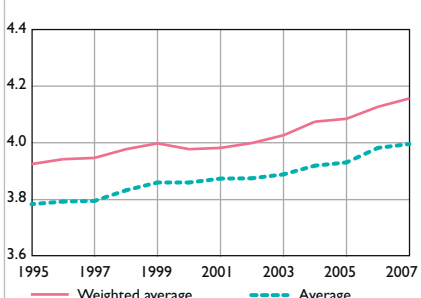
The aggregate productivity decomposition method developed by Olley and Pakes (1996) makes it possible to measure allocative efficiency of labour across firms. We therefore use this indicator in a decomposition carried out for European firms in the CompNet dataset.[10] This methodology is explained in more detail in the box below. Sector aggregate productivity for each country and year is decomposed in two terms: (i) average productivity of firms; and (ii) the covariance between firm-level productivity and employment, which measures the capacity of the most productive firms to take on more employees.

Results for France are detailed in Charts 4. Aggregate labour productivity is represented by the pink curve in Chart 4a.[11] Labour productivity increased by 2.1% per year between 1995 and 2007. The average unweighted firm-level productivity is represented by the green line. Allocative efficiency of labour, measured by the covariance between firm-level productivity and employment, is represented in Chart 4b. It is also equal to the difference between the aggregate productivity and the average productivity represented in Chart 4a (difference between the green and pink curves).

Charts 4 Decomposition of aggregate labour productivity in France (whole economy)

(in logs)

a) Labour productivity



b) Allocative efficiency of labour (covariance between employment and labour productivity)

Note: Sector-level indicators are aggregated taking into account each sector's share of the total value added.
Sources: CompNet micro database and authors' calculations.

10 Bellone and Mallen-Pisano (2013) use the Hsieh and Klenow methodology (2009) to measure allocative efficiency in a comparison between France and the United States.

11 Aggregate productivity is obtained for each year by computing a weighted average of sector-level productivity (obtained from the CompNet database). Each share represents the proportion of the sector k in the value added total. Productivity at sector level is the weighted average of the individual productivities of firms.

Box

Productivity decomposition – Olley and Pakes methodology (1996)

The methodology developed by Olley and Pakes (1996) allows sector-specific productivity to be decomposed into two terms: the average productivity of firms operating in the sector, and a second term measuring the allocative efficiency of production factors across firms. In this decomposition a more efficient allocation of resources correlates with larger firms being the most productive. If we look at a firm's labour productivity, defined as value added per employee deflated by prices, allocative efficiency of labour is obtained when the most productive firms attract a significant share of total labour in the sector, while less productive firms attract a smaller share. Olley and Pakes (1996) showed that telecommunications sector deregulation in the United States led to within-sector aggregate productivity growth, resulting from the reallocation of labour towards the most productive firms.

Using European CompNet firm-level data and omitting country and sector notations, sector productivity (P_t) *can be decomposed for each year* t *as follows:*

$$P_t = \left(\frac{1}{N_t}\right) \sum p_{it} + \sum (\theta_{it} - \bar{\theta}_t)\,(p_{it} - \bar{p}_t)$$

In this decomposition, the variable P_{it} *measures the individual productivity of each firm in the sector,* P_t *the average productivity of firms in the sector,* θ_{it} *each firm's share of total labour in the sector, and* $\bar{\theta}_t$ *the average share.*

The first term of this decomposition of sector-specific productivity corresponds to the average labour productivity of firms in the sector. The second term measures the covariance between individual productivity of firms and the total share of sector labour. The sum of these two terms corresponds to sector labour productivity, the growth of which can be explained by an increase in average productivity of firms or by a reallocation of labour towards the most productive firms.

In the microeconomic CompNet database, this decomposition was initially carried out for 2-digit NACE sectors for 11 European countries (see CompNet Task Force, 2014, for further details).

These sector-specific indicators (sector-level labour productivity, average productivity of firms and the covariance term between productivity of firms and the share in employment) are then aggregated for each country so as to facilitate annual cross-country comparisons. We compute a weighted average for each indicator, where the value of each indicator for each sector is weighted by the sector's share of the total value added for the country.

These charts show that in France labour is generally allocated towards the most productive firms. Each year, the covariance between firm-level labour productivity and employment is positive, and contributes favourably to aggregate productivity. The value of this covariance for France (between 0.1 and 0.15) is consistent with the findings presented by Bartelsman, Haltiwanger and Scarpetta (2013) for the period 1993-2001. This is below the allocative efficiency measured in the United States in their study, suggesting that potential gains in terms of aggregate productivity could be obtained in France by improving the allocation of labour towards the more productive firms.[12]

No clear pattern can be observed in Chart 4b regarding changes to the allocative efficiency of labour between 1995 and 2007. It fell in the early 2000s but then started to increase slightly in 2002 and remained relatively stable if we consider the whole period. Indeed, studies using this decomposition of sector productivity seem to indicate that, for emerging economies or transition economies, significant upward movements of this indicator can be observed for the whole economy during periods of rapid growth (Bartelsman, Haltiwanger and Scarpetta, 2013). On the other hand, productivity gains in advanced economies seem to be mostly explained by growth in average firm performance. Nishida *et al.* (2013) highlight a statistical bias in the Olley and Pakes decomposition (1996), which is likely to reduce the contribution of the effects of reallocation. Above and beyond this bias, it seems that allocative efficiency of labour, measured for the whole economy, increases more rapidly during major structural changes such as those seen by transition economies at the beginning of the 1990s or certain emerging economies after trade and financial liberalisation.

We complete this analysis by providing more details for the manufacturing and services sectors. The stylised facts in Charts 5 confirm that higher labour productivity growth is found in manufacturing sectors than services. Aggregate labour productivity for services is presented in Chart 5a and the aggregate labour productivity for manufacturing in Chart 5b. These charts also show that productivity growth in both sectors is mostly explained by variations in average firm-level performance, while the allocative efficiency of labour (difference between the two curves) only increases slightly, confirming the findings for the whole of the economy. Moreover, higher allocative efficiency can be observed in manufacturing sectors than in services (larger difference between the aggregate productivity of firms in each sector).

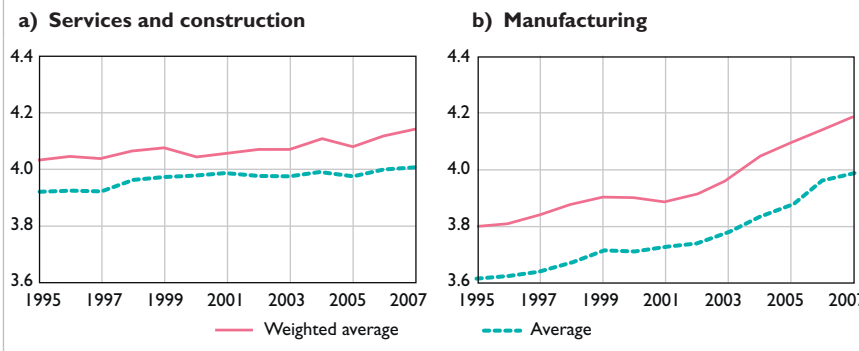
Charts 6 show the results of the decomposition of labour productivity in Belgium, Spain, Germany and Italy.[13] The allocative efficiency of labour is the difference between the weighted average of productivity (green) and

12 These differences can, in part, be explained by differences in sector definitions. A constant sector structure analysis, putting France on a level playing field with other countries, would give a more accurate comparison.

13 As with the other findings, the low sample representativeness for Germany and Italy means that we must be careful in our interpretation of results for these two countries. However, the samples for Belgium and, to a lesser degree, those for Spain are more comparable to the sample for France.

Charts 5 Decomposition of aggregate labour productivity in France (services and construction versus manufacturing)

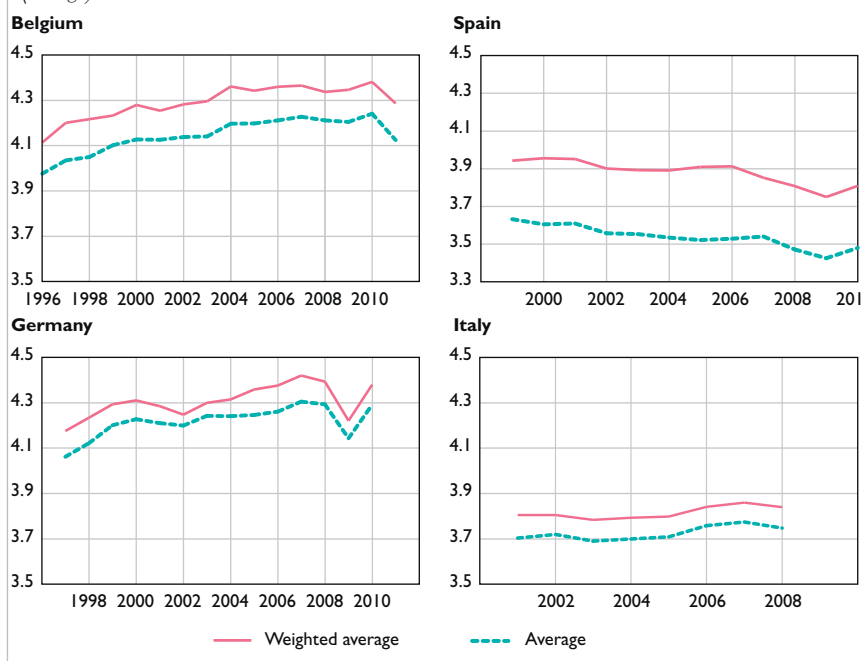
(in logs)



Note: Sector-level indicators are aggregated taking into account each sector's share of the total value added.
Sources: CompNet micro database and authors' calculations.

Charts 6 Decomposition of aggregate labour productivity in European economies (whole market economy)

(in logs)

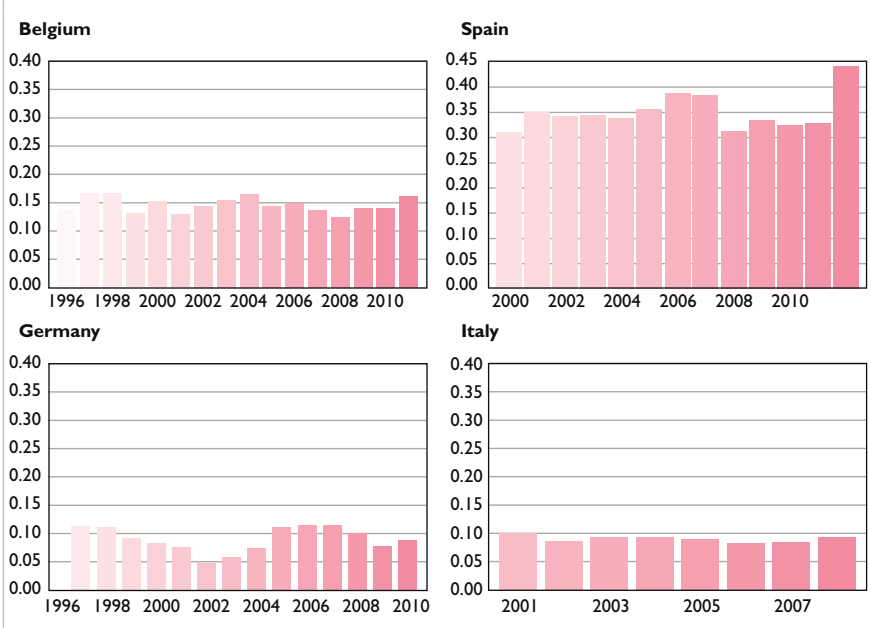


Note: Sector-level indicators are aggregated taking into account each sector's share of the total value added.
Sources: CompNet micro database and authors' calculations.

the average productivity of firms (pink). This is presented in Chart A1 in the appendix. The overall findings confirm the lessons of the decomposition of aggregate productivity previously obtained for France. Changes in aggregate productivity are mostly driven by changes in the average productivity of firms within each sector. The case of Spain is particularly revealing: the fall in productivity in the 2000s is not explained, for the whole economy, by lower allocative efficiency (the difference between aggregate productivity and the average productivity of firms remains fairly constant), but by a reduction in the performance of firms within each sector. Average firm performance also explains, as is the case with France, the increase in aggregate productivity in Belgium. The influence of the average productivity of firms seems to be confirmed for Germany and Italy.

Charts 7 confirm that, for the major European economies, the allocative efficiency of labour term in the decomposition of aggregate productivity is stable over time. On average for the whole economy, labour is allocated towards the most productive firms, which results in a positive covariance between firm-level employment and labour productivity. However, in spite of the fact that aggregate productivity is lower in Spain than in France or

Charts 7 Measure of allocative efficiency of labour in European economies (whole economy)



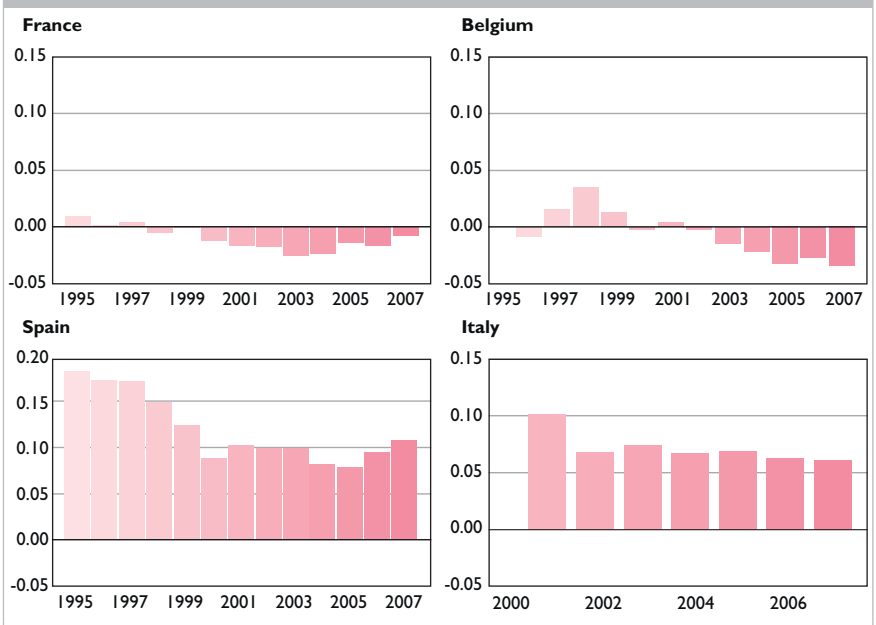
Note: Sector-level indicators are aggregated taking into account each sector's share of the total value added. As the figures on the y axis correspond to a covariance, they are read in %.
Sources: CompNet micro database and authors' calculations.

Belgium (Charts 4 and 6), the allocative efficiency of labour term is higher there.[14] Allocative efficiency of labour does not, therefore, adequately explain the differences in cross-country aggregate productivity in Europe. The higher levels of aggregate productivity in France and Belgium in comparison with Spain seem rather to reflect differences in average firm performance.[15]

The limited influence of allocation of labour across firms on changes over time in labour productivity, measured for the whole economy, potentially masks a more marked trend for certain sectors. Indeed, demand dynamics and changes over time in levels of competition have had an impact on allocation of labour and thus contributed to sector-level changes in aggregate productivity.

Charts 8 show that for the construction industry in France, Belgium, Spain and Italy, which was characterised by a rapid increase in demand over the years up to the crisis of 2008, changes in the allocative efficiency of labour were translated by a gradual allocation of labour towards the least

Charts 8 Measure of allocative efficiency of labour in European economies (construction sector)



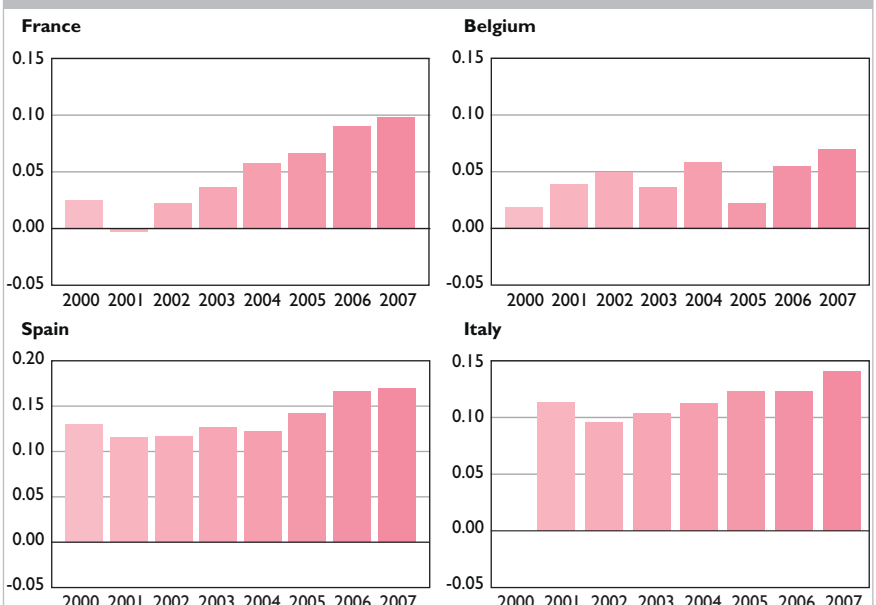
Note: Sector-level indicators are aggregated taking into account each sector's share of the total value added. As the figures on the y axis correspond to a covariance, they are read in %.
Sources: CompNet micro database and authors' calculations.

14 A possible explanation of this finding for Spain is that very unproductive firms manage to survive while accounting for a very low proportion of employment, which would increase the covariance between firm-level employment and productivity.
15 This finding is, however, subject to biases in the representativeness of firm productivity levels.

productive firms. This is illustrated by a lower allocative efficiency of labour, which had a negative impact on productivity performance.

On the other hand, in the textiles sector there was a major increase in foreign competition from low-wage countries, particularly when import regulation quotas were scrapped in 2005 under the Multi-Fibre Agreement and in the context of rapid growth in imports from China. Recent studies have highlighted the positive impact of foreign competition in this sector from the standpoint of firm-level productivity, the adoption of new technologies and quality (Martin and Méjean, 2011; Bloom *et al.*, 2012; Khandelwal *et al.*, 2013). Charts 9 show that there has been a substantial reallocation of labour in the textiles industry during the period of trade liberalisation. As reductions in employment affected the least productive firms in the sector, higher allocative efficiency can be seen over the 2000s, translating into higher aggregate productivity in the sector.[16]

Charts 9 Measure of allocative efficiency of labour in European economies (textiles sector)



Note: Sector-level indicators are aggregated taking into each sector's share of the total value added. As the figures on the y axis correspond to a covariance, they are read in %.
Sources: CompNet micro database and authors' calculations.

16 *Of course this is to very significantly underplay the very rapid structural changes that have been seen in recent years in the textiles industry in a context of very rapid growth in competition. In particular, the covariance between employment and the productivity of firms in the Olley and Pakes decomposition (1996) does not account for firm selection. Moreover, increases in the productivity of firms and labour efficiency are observed in this sector, over the same period, to the detriment of employment levels.*

5| Conclusion

The findings presented in this paper allow an initial comparison of microeconomic determinants of growth and aggregate productivity in European countries. They rely on a database recently developed by the Competitiveness Research Network, CompNet. This database adds to the sector-level data already provided by other existing databases, such as EUKLEMS or STAN (OECD), by providing indicators calculated at firm level.

Although the variable representativeness of samples from one country to another means we should consider the results with caution, our study confirms that the allocative efficiency of labour contributes positively to aggregate productivity in European countries. In France, as in other major European economies, labour is allocated to the most productive firms in each sector, which allows higher aggregate productivity to be achieved. Differences between European countries in terms of allocation of labour do not seem to explain the differences in levels of aggregate productivity, however. These differences are explained by differences in average performance of firms (average productivity). The analysis also shows that aggregate productivity trends are mainly due to changes in average firm-level productivity, while the allocative efficiency of labour shows little change if we consider the whole economy.

Changes in intra-firm productivity thus appear as the major determinant of productivity growth at the macroeconomic level. This result is consistent with recent theoretical work (Constantini and Melitz, 2008, Atkeson and Burstein, 2010; Burstein and Melitz, 2013) which consider productivity as an "endogenous" variable that reacts strongly to external shocks such as demand shocks. It suggests that innovation, which influences the average productivity of firms, is a major determinant of changes in aggregate productivity in the medium and long term, while the reallocation of market share between firms appears to play a smaller role for advanced economies when we consider the whole economy.

The significant contribution of firm-level dynamics (average productivity) to changes in aggregate productivity does not necessarily imply that the effects of reallocation between firms should be ignored. Recent studies based on a sufficiently large sample of countries, show that certain labour market and goods market regulations tend to reduce aggregate productivity, particularly due to a less efficient allocation of labour as a result of reduced labour mobility (Andrew and Cingano, 2012). The results produced in our paper for some sectors such as construction or textiles suggest that demand shocks or increased foreign competition can lead to a substantial reallocation of labour between firms, which strongly influences productivity in these sectors.

In future research, a more systematic econometric analysis based on a panel of countries would allow the relationship between demand shocks, market competition and intra-sector productivity trends to be evaluated. It would be particularly interesting to be able to distinguish demand and supply shock effects, and their respective influence on the various components of sector-level productivity: performance of firms and allocative efficiency.

References

Alfaro (L.), Charlton (A.) and Kanczuk (F.) (2008)
"Plant-size distribution and cross-country income differences", *NBER Working Papers*, No. 14060.

Andrew (D.) and Cingano (F.) (2012)
"Public policy and resource allocation: evidence from Firms in OECD Countries", *OECD Working Papers*, No. 996, OECD Publishing.

Atkeson (A.) and Burstein (A. T.) (2010)
"Innovation, firm dynamics, and international trade", *Journal of Political Economy*, University of Chicago Press, 118(3), pp. 433-484, 06.

Aw (B.), Roberts (M.) and Xu (D.) (2011)
"R&D investment, exporting, and productivity dynamics", *American Economic Review*, 101, pp. 1312-44.

Bartelsman (E.), Haltiwanger (J.) and Scarpetta (S.) (2013)
"Cross-country differences in productivity: the role of allocation and selection", *American Economic Review*, 103(1), pp. 305-334.

Bellone (F.) and Mallen-Pisano (J.) (2013)
"Is there higher misallocation in France than in the United States?", *mimeo.*

Bernard (A. B.), Redding (S. J.) and Schott (P. K.) (2011)
"Multiproduct firms and trade liberalization", The *Quarterly Journal of Economics*, Oxford University Press, 126(3), pp. 1271-1318.

Bloom (N.), Draca (M.) and Van Reenen (J.) (2012)
"Trade-induced technical change? The impact of Chinese imports on innovation, IT and productivity", *mimeo.*

Burstein (A.) and Melitz (M.) (2013)
"Trade liberalization and firm dynamics. In Advances in economics and econometrics tenth world congress". Applied economics. Econometric society monographs. Vol. 2. Cambridge, RU: Cambridge University Press.

Bustos (P.) (2011)
"Trade liberalization, exports and technology upgrading: Evidence on the impact of Mercosur on Argentinean firms", *American Economic Review*, 101, pp. 304-340.

CompNet task force (2014)
"Micro-based evidence of EU competitiveness: The CompNet database", *ECB Working Paper*, No. 1634.

Constantini (J.) and Melitz (M.) (2008)
"The dynamics of firm-level adjustment to trade liberalization", Helpman (E.), Marin, (D.) and Verdier (T.) (eds) The organization of firms in a global economy (Cambridge MA: Harvard University Press), pp. 107-141.

Gabaix (G.) (2011)
"The granular origins of aggregate fluctuations", *Econometrica*, Econometric Society, 79(3), pp. 733-772, 05.

Grossman (G.) and Helpman (E.) (1991)
"Innovation and growth in the global economy", Cambridge, MA, MIT.

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

Khandelwal (A.), Schott (P.) and Wei (S. J.) (2013)
"Trade liberalization and embedded institutional reform: evidence from Chinese exporters", *American Economic Review*, 103(6), 2169-95.

Lecat (R.), Chevalier (P-A.) and Oulton (N.) (2008)
"Convergence de la productivité des entreprises, mondialisation, technologies de l'information et concurrence", Économie et Statistique, No. 419-420.

Levinsohn (J.) and Petrin (A.) (2003)
"Estimating production functions using inputs to control for unobservables", *Review of Economic Studies*, Wiley Blackwell, vol. 70(2), pp. 317-341, 04.

Lileeva (A.) and Trefler (D.) (2010)
"Improved access to foreign markets raises plant-level productivity... for some plants", *The Quarterly Journal of Economics*, MIT Press, 125, pp. 1051-1099.

Luttmer (E. G. J.) (2007)
"Selection, growth, and the size distribution of firms", *The Quarterly Journal of Economics*, MIT Press, vol. 122(3), pp. 1103-1144, 08.

Martin (J.) and Méjean (I.) (2011)
"Low-wage countries' competition, reallocation across firms and the quality content of exports", *CEPR Discussion Papers* 8231.

Melitz (M.) (2003)
"The impact of trade on intra-industry reallocations and aggregate industry productivity", *Econometrica*, Econometric Society, 71, pp. 1695-1725.

Melitz (M. J.) and Polanec (S.) (2012)
"Dynamic Olley-Pakes productivity decomposition with entry and exit", *NBER Working Papers*, No. 18182.

Midrigan (V.) and Xu (D. Y.) (2010)
"Finance and misallocation: evidence from plant-level data", *NBER Working Papers*, No. 15647.

Mitsukuni (N.), Petrin (A.) and Polanec (S.) (2013)
"Exploring reallocations apparent weak contribution to growth", *NBER Working Papers*, No. 19012.

Olley (G.S.) and Pakes (A.) (1996)
"The dynamics of productivity in the telecommunications equipment industry", *Econometrica*, Econometric Society, 64(6), pp. 1263-1297.

Pavcnik (N.) (2002)
"Trade liberalization, exit, and productivity improvement: evidence from Chilean plants", *Review of Economic Studies*, Wiley Blackwell, 69(1), pp. 245-76.

Restuccia (D.) and Rogerson (R.) (2008)
"Policy distortions and aggregate productivity with heterogeneous establishments", *Review of Economic Dynamics*, 11, pp. 707-720.

Syverson (C.) (2004)
"Product substitutability and productivity dispersion", *The Review of Economics and Statistics*, MIT Press, vol. 86(2), pp. 534-550, May.

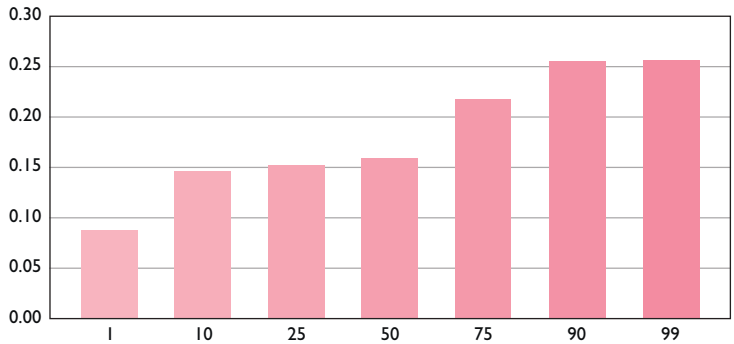
Verhoogen (E.) (2008)
"Trade, quality upgrading and wage inequality in the Mexican manufacturing sector", *The Quarterly Journal of Economics*, 123, pp. 489-530.

Wooldridge (J.) (2009)
"On estimating firm-level production functions using proxy variables to control for unobservable", *Economics Letters*, 104, pp. 112-114.

Appendix

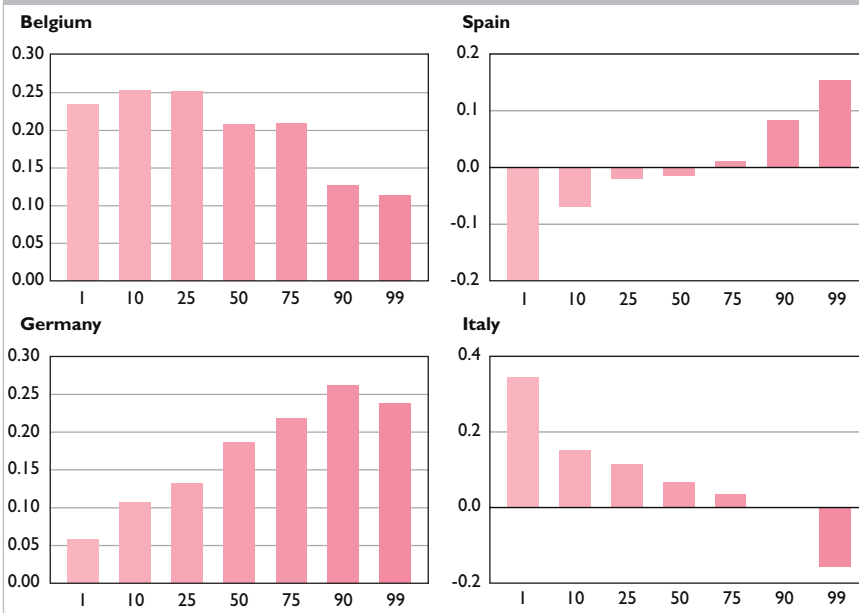
Chart A1 Changes in the distribution of labour productivity for French firms (2001-2007)

Manufacturing sector



Note: Sector-level indicators are aggregated taking into account each sector's share of the total value added. The variation in labour productivity is expressed as a percentage (y axis), with the x axis corresponding to the distribution percentiles.
Sources: CompNet micro database and authors' calculations.

Charts A2 Changes in the distribution of labour productivity for European firms in the manufacturing sector (2001-2007)



Note: Sector-level indicators are aggregated taking into account each sector's share of the total value added. The variation in labour productivity is expressed as a percentage (y axis), with the x axis corresponding to the distribution percentiles.
Sources: CompNet micro database and authors' calculations.

How do house prices affect wages? A comparison between France and Germany

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While wages and the cost of housing have increased in both France and Germany over the 2000s, significant divergences have appeared between the two countries: in France, the increase in wages and house prices has been very rapid (an increase of 41 and 250 percentage points respectively over the period from the fourth quarter of 1996 to the same quarter of 2012), while the pace has been much slower in Germany (an increase of 22 and 107 percentage points respectively). This suggests that differences in house prices may have contributed to the divergence in wage growth between Germany and France. In this article, the author provides evidence to support this thesis. The analysis proceeds in two stages. First price indices are developed which take account of house prices. Second, these price indices are used to quantify the impact of trends in the housing market on the differences in wage growth between the two countries. Assuming a unitary indexation of wages to price levels, the author concludes that the adjusted price indices can explain up to 70% of the difference in wage growth between the two countries.

Key words: wages, cost of housing, French economy, German economy, CPI

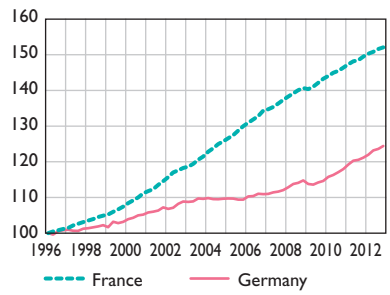
JEL codes: J3, R21

NB: The author would like to thank Laurent Baudry for his excellent work in the role of research assistant. Thanks also go to Gilbert Cette, Olivier Chatal, Filippo Ferroni, Rémy Lecat, Matthieu Lemoine, Hervé Le Bihan, Matteo Mogliani, Katja Schmitt, Pierre Sicsic, Jacek Suda, Romain Wolf and the participants in the Microeconomic and Structural Research Directorate workshop where the paper was presented. All errors and omissions are the author's own.

Wages grew at a much faster rate in France than in Germany over the period 1996-2012 (see Chart 1). Very significant differences in house price trajectories have also been observed, with a sharp increase in France and almost stagnant prices in Germany (see Chart 2). The difference in trends in housing costs is less marked with regard to rents (see Chart 3). This trend does, however, need to be put into perspective against recent developments. From 2008, there was a rebound in wages and house prices in Germany, while in France they more or less stagnated. Nevertheless, the upward long-term trend is higher in France for both indicators.

Chart 1 Average wage per capita, nominal values

(Q1 1996 = 100)

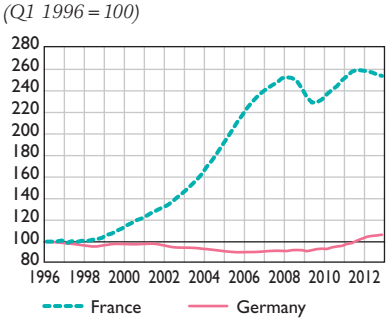


Sources: Insee (France), OECD (Germany).

The objective of this study is to examine the relationship between changes in the cost of housing and wages in France and Germany, in order to determine to what extent differences in rates of growth in house prices[1] between France and Germany during the 2000s can explain differences in wage growth. Given that the cost of labour is a key determinant of the competitiveness of French and German firms, house price trends may be one explanatory factor for the decline in French firms' competitiveness with respect

Chart 2 Evolution of the price of dwellings

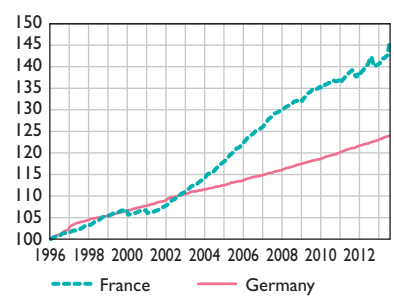
(Q1 1996 = 100)



Sources: Insee (France), Deutsche Bundesbank (Germany).

Chart 3 Evolution of the "rentals" component of the HICP

(Q1 1996 = 100)



Sources: OECD, Insee, Deutsche Bundesbank.

1 *Our study focuses on changes in housing costs. The existing data suggest that housing prices are higher in France, with a difference of around 30-40% in 2012. Until 2002, average purchase prices were higher in Germany. (See "House prices in France and Germany" internal DGEI-DCPM-DIACONJ note, July 2013).*

to their German counterparts. It is thus no coincidence that the issue of house price inflation has sparked intense debate and considerable concern in France.[2]

In this study, we look at the transmission mechanism whereby changes in housing costs are passed through to wage growth via their impact on the general level of prices. Indeed, since housing accounts for a significant proportion of household expenditure, any changes in the cost of housing are liable to have a major impact on the cost of living, which may in turn affect wage claims.

To examine these mechanisms, our study proceeds in three stages. Firstly we give a brief presentation of the channels through which housing costs influence wages, as identified in recent economic literature. We then develop consumer price indices that take into account, in a comparable manner, changes in house prices in both countries, in order to address some of the limitations of traditional indices. In doing so, we will be able to gain a better understanding of how developments in the housing market affect household purchasing power. Finally, in the third section, we use these adjusted price indices to attempt to quantify the impact of changes in the cost of housing on wage growth in both countries.

1| The housing market and wages: the main transmission channels identified in economic literature

The economic literature has identified several mechanisms via which developments in the housing market can impact the labour market in general and wages in particular. In this section, we discuss these mechanisms in a simple and intuitive manner, focusing only on those mechanisms which provide an explanation for the macroeconomic relationship between wages and housing costs. Readers interested in an in-depth analysis of these mechanisms should consult Bover *et al.* (1989).

A first transmission mechanism is the cost-of-living effect, which is the impact of changes in the cost of housing on the cost of living for households. Indeed, since housing accounts for a significant proportion of household expenditure, housing market shocks in a given region, resulting in higher purchase or rental prices, have a direct impact on the standard of living of employees (owners or tenants) and can, therefore, lead to higher wage demands. Numerous empirical studies (see references below) have demonstrated a positive correlation between house prices and wages,

2 *For example, the French Finance Act of 2013 and Conseil d'analyse économique (CAE – French Council of Economic Analysis), Note No. 2* "How should housing prices be moderated?" *by Alain Trannoy and Étienne Wasmer (February 2013).*

and it is reasonable to expect this correlation to be particularly close in countries or sectors where unions are powerful and wages are set through collective bargaining.

A second mechanism likely to lead to a positive relationship between house prices and wages concerns the wealth effect on owner households when the price of their homes rises. These wealth effects can result in increased consumption by these households, which can be regarded as a demand shock, leading to an increase in the demand for labour and potentially positive effects on wages.[3]

A third mechanism relates to the effects of housing costs on the structure of businesses' operating costs (excluding wages). Housing price increases in a given region have a negative effect on the profits of firms located in the region in question, negatively impacting earnings and employment in these companies. Significant housing price shocks may discourage new businesses from setting up in these regions and lead to the migration of companies to other regions. Higher set-up costs, therefore, result in a negative relationship between house prices and wages, offsetting the positive effects identified in the previous paragraphs.[4]

These three mechanisms may thus explain the impact of changes in the housing market on the labour market. However, the causality can also be reversed: changes in the labour market may also affect housing market dynamics. Indeed, if productivity shocks result in higher wages and excess demand in the housing market, this increase in wages may, at least in the short term, lead to increases in housing costs. Studies carried out in the field of economic geography suggest that productivity is higher in large cities, which explains why firms prefer to be located in large cities, in spite of higher housing and wage costs.

As a result, identifying a causal relationship between the housing market and wages is troublesome. Nevertheless it has been demonstrated in several studies. For example, in the case of the United Kingdom, Bover *et al.* (1989) show that wages are positively affected by housing prices with a one-year lag. Other studies based on British data at regional level came up with similar findings. For example, Blackaby and Manning (1992), and Cameron and Muelbauer (2000) conclude that an increase in house prices in a given area leads to an increase in wages of manual workers. Similar studies for the United States, such as Winters (2009), on the basis of a test of the cost-of-living

3 *Available studies for France show that these effects exist but are quantitatively weak (Arrondel, Savignac and Tracol, forthcoming; Chauvin and Damette, 2010). Studies using microeconomic data showed positive wealth effects in the United Kingdom (Campbell and Cocco, 2007) and numerous studies have found positive effects in the case of the United States, supporting the macroeconomic evidence (see Gale and Sabelhaus, 1999).*

4 *A fourth mechanism, often mentioned in papers on the subject, by which the housing market can affect the labour market concerns owner interregional mobility. Indeed, it has been shown that homeowners are less likely to migrate from their residential area when faced with negative shocks to employment, which would generate a positive relationship between the share of owner-occupier housing and structural unemployment, and a negative impact on wages. Thus, Blanchflower and Oswald (2013) show that increases in rates of homeownership in the United States are correlated with lower levels of mobility, greater travel time to get to work and lower company creation rates. See also Oswald (1997, 1999).*

theory, identify a positive effect of house prices on regional wages. These last studies use instrumental variables methodology to establish a causal relationship between house prices and wages.

Given the complexity of the relationship between the housing market and wages, this study does not purport to demonstrate a causal link. It aims to provide some descriptive evidence on the subject, allowing an (approximate) quantification of this evidence.

2| The housing market and general price levels: adjusted price indices

Different country-by-country treatment of housing services

The consumer prices index (CPI) reflects the change in the average price of goods and services consumed by households, weighted by their share of average consumption. Housing services make up a significant proportion of household consumption, but their inclusion is complex, especially for households that own their dwelling, as these households consume housing services without any payment, meaning these unpaid-for services are not directly measurable.

Housing services are handled differently across euro area countries, making international comparisons more complicated. For example, the French CPI only includes actual rents (actual expenditure incurred by tenants). Therefore owner-occupier housing is not taken into account in spite of the fact that this group is estimated at 58% for 2010.[5] On the other hand, for owner-occupier housing, the German CPI imputes rents computed according to the characteristics of the housing.[6]

Similarly, the European-level Harmonised Index of Consumer Prices (HICP) only includes actual rents, so as to obtain an index that can be compared across countries. This is not a satisfactory solution and has led the European Commission to call for a harmonised treatment of owner-occupier housing in the HICP.[7] The methodological bases of these new HICPs are under discussion, and the *Technical manual on owner-occupied housing* is currently being drawn up.[8] Implementation dates for these indices are, however, still undetermined.

5 *Depending on whether or not usufructuaries are included in the definition, the percentage of owner-occupier households is estimated at 58% or 55% in France in 2010. For this study, we include usufructuaries in the group of homeowners as they enjoy housing services without payment. Sources:* 2010 Wealth survey *(Insee) and* Eurosystem household finance and consumption network *(2013).*

6 *See Lecat (2003).*

7 *See Commission Regulation (EC) No 93/2013 of 1 February 2013.*

8 *Eurostat (2012). The March 2012 version is available at the following address:* http://epp.eurostat.ec.europa.eu/portal/page/portal/hicp/documents_meth/OOH_HPI/Detailed_Technical_Manual_on_Owner-Occupied_Housing-v2.pdf

From a practical point of view, omitting owner-occupier expenditure from the index reduces the weights of the housing item, resulting in a reduction of the impact of housing prices on the general level of prices measured. This bias is apparent when comparing the German CPI and HICP (the latter excludes imputed rents). Table 1 gives the weights of the "Rentals" item (04.1) for both indices. The proportion of owner-occupier housing is around 44% in Germany (source: Household Finance and Consumption Network or HFCN),[9] which gives housing expenditure weights that are double that of the HICP. The size of the bias induced by the omission of owner-occupier expenditure grows in proportion to the total number of households that owner-occupier dwellings represent.

Table 1 Weights for housing expenditures in the German CPI and HICP

(‰)

	2000	2005	2010
CPI	212	203	210
HICP	115	109	104

Sources: Destatis and Eurostat.

Two approaches for computing housing services are outlined in the Eurostat Manual: *imputed rents* and *net acquisitions*.[10] We review them successively, presenting their principal characteristics, and we provide HICPs adjusted according to each approach. These estimates must be considered as approximate as some of the necessary data are not yet available. We used the HICP as a starting point to achieve comparable series for both countries. Given their methodological proximity, changes in inflation measured by the two types of indices are almost identical in both countries over the period in question.[11]

The imputed rents approach

This approach consists in imputing notional rents onto owner-occupier households for their dwellings. Imputed rents are calculated according to actual rents paid for similar dwellings, under the assumption that they are a good measure of the opportunity cost of living in one's own dwelling. In other words, the household is considered to be paying rent to itself. A weakness of this approach is that it is based on imputed values and not on actual transaction prices.

We use the proportion of owner-occupier households to adjust the weights for housing services (the proportion of owner-occupier housing was 58% for France and 44% for Germany in 2010 – sources: *Institut national de*

9 See Eurosystem household finance and consumption network *(2013)*.

10 *A third approach is the "Payments" approach. Under this approach, all monetary outlays made by households when buying a dwelling must be included, including mortgage interest and capital repayments. These can hardly be considered as consumer spending, which is why Eurostat does not recommend this method.*

11 *Housing benefits (APL, ALF and ALS – the three types of housing assistance available in France) reduce the "net" cost of housing, defined as the price paid net of benefits paid by the state. Housing benefits are considered as income (like grants and scholarships, for example) and are not deducted from the price (both in the CPI and in the HICP; see Barret* et al., *2003). Insofar as more housing assistance is given by the state in France than in Germany, these benefits have the effect of reducing the difference in housing costs between the two countries, something that is not captured by the price indices.*

Table 2 Weights according to the imputed rents approach

(‰)

	France			Germany	
	Original shares	Adjusted CN shares	Shares adjusted for owner rates	Original shares	Shares adjusted for owner rates
1996	141	315	253	213	324
1997	145	322	258	215	327
1998	147	327	262	216	328
1999	154	348	279	216	328
2000	151	340	271	217	350
2001	146	330	258	217	347
2002	140	323	250	216	346
2003	143	329	256	216	346
2004	144	335	260	218	347
2005	145	335	261	218	346
2006	147	338	263	224	350
2007	148	341	267	227	351
2008	146	341	265	231	352
2009	147	344	266	236	356
2010	150	348	271	230	351
2011	155	352	275	233	353
2012	158	352	276	239	359

Sources: Insee, Destatis, author calculations.

la statistique et des études économiques (Insee – French National Institute of Statistics and Economic Studies and HFCN survey). We also use the imputed rents provided by the *Comptabilité nationale* (CN – French National Accounting) household consumption accounts ("CN share").

Imputed rents for owner-occupier housing are constructed on the basis of rents paid for similar housing on the private rental market. They are representative of the rents prevailing in the private market.[12]

For France, the adjusted weights are up to twice as large as the original ones. They were 12 percentage points higher over the period analysed. The HICP is presented on a quarterly basis in Table A2 in the Appendix, as well as the formulas used and their derivation.[13]

Cumulative inflation in France for the period 1996-2012, as measured by the indices adjusted for the imputed rent weights (see Table 3), is then up to 4 points higher than the original value. The difference between the adjusted index and

12 *They exclude rents paid for social housing. Imputed rents are deflated by the open market rent index averaged over a year from the Rents and Charges Survey. This index incorporates taxes, including lease tax (with exceptions, rents are not subject to VAT). See methodological note on the revision of rents in the housing satellite account and national accounts, CGDD/SOeS (where CGDD refers to the* Commissariat général au Développement durable *or General Commission for Sustainable Development and SOeS to the* Service de l'Observation et des Statistiques *or Observation and Statistics Office), References, Housing accounts, First 2010 results and 2009 accounts, March 2011.*

13 *An alternative method which transposes the weights of housing in the German CPI to the French HICP has also been developed. We have not included it here for reasons of brevity. The results obtained are similar to those presented.*

Table 3 Results obtained with the imputed rents approach

(%)

Q4 1996 – Q4 2012	France (Q4 2005 =100)			Germany (Q4 2005 =100)	
	HICP	Adjusted HICP		HICP	Adjusted HICP
		CN share	Share with owner rates		Share with owner rates
Cumulative inflation	31.27	35.33	33.88	28.65	29.41
Average quarterly inflation	0.43	0.48	0.46	0.39	0.40
Average annual inflation	1.72	1.91	1.84	1.59	1.63

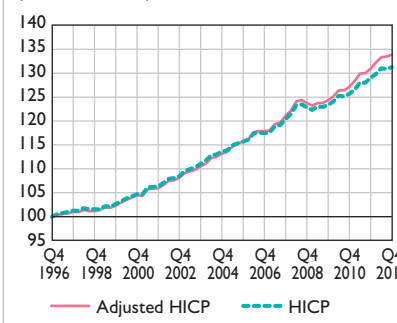
Sources: Insee, author calculations.

the HICP becomes very significant as of 2005 (see Chart 4). For Germany, there is only a 1 point difference.

An alternative way of measuring the cost of living is provided by consumption deflators, which do include imputed rents. Cumulative inflation, computed using consumption deflator growth, was 26 points in France (compared to 22 points in Germany). The differential between France and Germany is 4.45 points, which is very close to that obtained using the imputed rents method (4.47).

Chart 4 French HICP adjusted according to the imputed rents approach (Share with owner rates)

(Q4 1996 = 100)



Sources: Insee, author calculations.

The net acquisitions approach

The net acquisitions approach treats housing as durable goods and is based on the same principles applied to other durable goods, including vehicles. This approach has the support of Eurostat (it is recommended in the Technical Manual on Owner Occupied Housing).[14] According to these principles, expenditures related to the acquisition of dwellings are calculated at the housing market value and are fully imputed at the time of acquisition. The main advantage of this method is that it reflects changes in actual transaction prices, which is consistent with the principles applied to other components of consumer price indices.

This approach requires the inclusion of an additional component taking into account expenditures incurred in the acquisition of dwellings. As recommended by Eurostat (2012), we use the ratio between housing

14 The publication of a price index specific to owner-occupier housing is scheduled for September 2014. The European Commission has set a five-year deadline from September 2014 for the preparation of a report analysing the usefulness of these indices for the application of the acquisitions approach to HICPs (Commission Regulation – EC – No 93/2013 of 1 February 2013).

expenditures and rental expenditures to calculate the weights of this component,[15] using national accounts data (see the details of the weights calculations in the appendix).[16]

In comparison with other consumer durables, there is an additional complication when taking into account expenditures incurred in the acquisition of dwellings in consumer price indices. Buying a property is both a housing services consumption purchase and an investment. In other words, housing is both a consumer good and an asset. However, the calculation of consumer price indices should only include consumption expenditure. A housing unit is made up of a structure built on land. A possible solution to this issue, and one we have adopted here, is to consider that the price of the land represents the investment portion and that the cost of the structure reflects the consumption component.[17]

In practice, however, distinguishing between these two aspects is difficult, as house price indices do not make the distinction between the price of the land and the price of the building. Given this difficulty, we have tried using house price indices that include the value of land, and construction costs indices that exclude the value of land. The results can be interpreted as upper and lower bounds respectively. The series thus obtained are given in the appendix. The changes in weights are shown in Table 4 and the changes in the indices in Table 5.

The results are qualitatively similar to those obtained using the imputed rents approach, but are quantitatively more significant. Due to the very rapid rise in house prices in France over the period considered, using these prices when applying the net acquisitions approach resulted in more pronounced price adjustments.[18]

Table 4 Weights according to the net acquisitions approach

(‰)

	France		Germany	
	Original shares	Adjusted shares	Original shares	Adjusted shares
1996	141	247	213	338
1997	145	254	215	337
1998	147	258	216	339
1999	154	279	216	337
2000	151	272	217	341
2001	146	263	217	327
2002	140	256	216	314
2003	143	262	216	314
2004	144	269	218	313
2005	145	272	218	310
2006	147	281	224	319
2007	148	289	227	325
2008	146	288	231	323
2009	147	271	236	320
2010	150	274	230	318
2011	155	283	233	327
2012	158	282	239	330

Sources: Insee, Destatis, author calculations.

15 The specific price index for owner-occupiers is likely to include, in addition to the value of the dwelling, acquisition, repair, maintenance and insurance costs. The Eurostat website provides details on these indices.

16 As in the case of durables, the weights must be calculated using net household expenditures (purchases less sales between households). Household sales are actually considered as "negative" expenditure, reducing the weights (see ILO, IMF, OECD, Eurostat, United Nations, World Bank, 2004).

17 See ILO, IMF, OECD, Eurostat, United Nations, World Bank (2004).

18 The Eurostat manual recommends the use of price indices of new dwellings, as they exclude transactions between households. We use price indices for existing dwellings as these indices have been published over a longer period for both countries. Calculations carried out with the price indices of new dwellings for France give similar results.

Table 5 Results obtained with the net acquisitions approach

(Q4 2005 = 100)

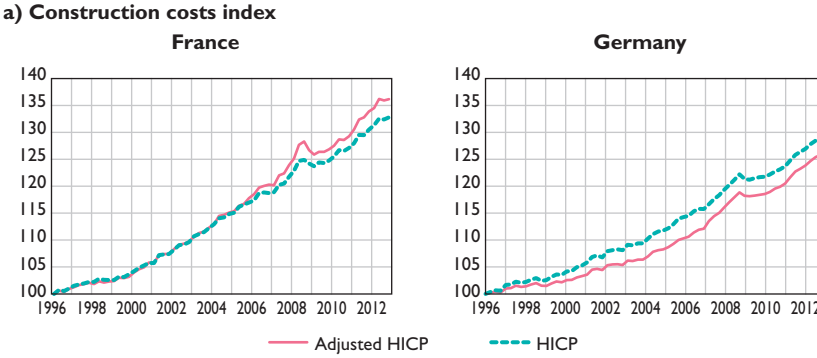
	Cumulative inflation	Average quarterly inflation	Average annual inflation
France			
HICP	31.27	0.43	1.72
Adjusted HICP			
Existing dwellings	40.02	0.53	2.13
New dwellings	38.62	0.51	2.07
Construction costs	34.65	2.07	1.88
House price index used			
Existing dwellings	150.81	1.45	6.09
New dwellings	56.83	0.73	2.88
Construction costs	101.95	1.13	4.55
Germany			
HICP	28.65	0.39	1.59
Adjusted HICP			
Existing dwellings	23.23	0.32	1.32
Construction costs	26.00	0.35	1.46
House price index used			
Existing dwellings	7.57	0.11	0.48
Construction costs	22.40	0.31	1.29

Sources : Insee, Destatis, author calculations.

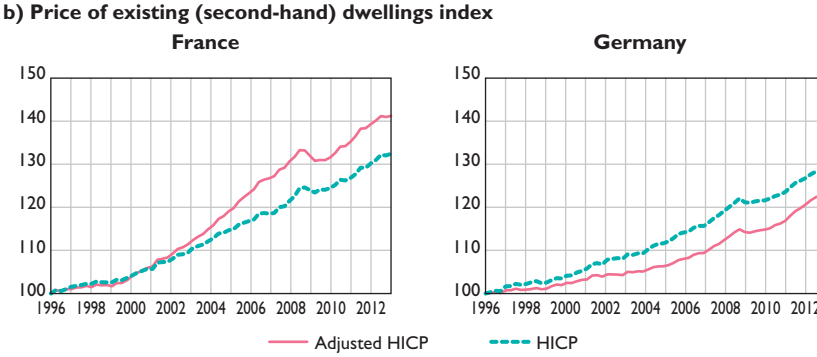
Charts 5 HICP adjusted according to the net acquisitions approach

(Q1 1996 = 100)

a) Construction costs index



b) Price of existing (second-hand) dwellings index



Sources: Insee (France), Deutsche Bundesbank (Germany) and author calculations.

In the case of France, HICPs adjusted in this way (column 2 of Table 5) show cumulative inflation of up to 10 points higher than the unadjusted HICP. The adjustment affects inflation in Germany in the inverse direction: given the small rise in house prices, the adjusted HICP changes more slowly over time than the unadjusted one. The differences are less pronounced when using construction costs indices, but still more significant than those obtained with the imputed rents approach.[19]

3| Changes over time in the cost of housing and wages in France and Germany

We shall now examine the relationship between changes over time in the cost of housing and wages in France and Germany (see Box).

The results are presented in Table 6. Over the period from the final quarter of 1996 to the final quarter of 2012, the cumulative difference in wage growth rates between France and Germany was 25.64 percentage points : $\frac{\Delta w_{FRt}}{w_{FRt}} - \frac{\Delta w_{GERt}}{w_{GERt}} = 25.64$. Assuming unitary elasticities $a_{GER} = a_{FR} = 1$, the cumulative difference in HICP growth rates (unadjusted) was 2.61 percentage points $\frac{\Delta IPC_{FRt}}{IPC_{FRt}} - \frac{\Delta IPC_{GERt}}{IPC_{GERt}} = 2.61$.

This is barely 10% of the wage gap. The share explained by price levels rises to 18% with the HICP adjusted under the imputed rents approach.

When considering the HICP adjusted using the net acquisitions approach, we observe that these indices account for a higher proportion of the wage differential: 34% with the construction costs index, against 65% with the price index for existing dwellings. The inclusion of housing prices in the price indices results in greater price trend differences between the two countries. However, as noted above, the impact of house prices is overstated in these indices due to the inclusion of the investment dimension associated with housing purchases. They must, therefore, be interpreted as an upper bound. The columns in the middle and on the right show the results obtained for the various indexation coefficients. We can see that the biggest differences between these coefficients accentuate the effects studied.[20]

19 *Over the period Q4 1996-Q4 2012, construction costs rose by 57% in France and 22% in Germany. Among reasons often cited are the recent proliferation of regulatory standards in France and the possible lack of competition in the sector (Trannoy (A.) and Wasmer (E.), CAE Note No. 2 "How should housing prices be moderated?", February 2013).*

20 *Expenditure on energy represents a significant portion of housing expenditure. The cost of energy increased much more rapidly in Germany over the period studied: the "Electricity, gas and other fuels" item went up by 32% in Germany and by 12% in France. Energy expenditure is included in the original HICPs. It affects the evolution of both the original and adjusted HICPs. The difference between the lines of Table 6 results from the additional variation explained by the incorporation of owner-occupier housing services expenditure.*

Table 6 Cumulative difference in wage growth rates between France and Germany over the period Q4 1996 - Q4 2012

	Share explained by the HICP, using the following indexation coefficients:					
Indexation coefficient • France • Germany	1.00 1.00		0.60 0.20		0.50 0.33	
	in percentage points	%	in percentage points	%	in percentage points	%
Unadjusted HICP	2.61	10	13.03	51	6.18	24
Adjusted HICP (owner rates)	5.05	20	14.80	58	7.53	29
Adjusted HICP (construction costs index)	8.65	34	15.59	61	8.75	34
Adjusted HICP (existing dwellings index)	16.79	65	19.37	76	12.34	48

Note: The table presents simulations obtained from equation (2) (see Box). The total effect is represented by the cumulative effect during the period from the last quarter of 1996 to the last quarter of 2012. The adjusted HICPs follow the approaches developed in Section 3.
Source: Author calculations.

Box

Model used to study the relationship between changes in housing costs and changes in wages

We use a standard economic model on the assumption that wages in each country are affected by prices:

$$\frac{\Delta w_t}{w_t} = a\,\frac{\Delta IPC_t}{IPC_t} + \mu_t \qquad (1)$$

where w_t *represents wages per capita,* CPI_t *represents the general price level and the term* μ_t *includes the other variables affecting wages per employee at macroeconomic level (productivity, unemployment, etc.). The operator* Δ *indicates a first difference. The variables are expressed in terms of growth rates. The parameter a is an indexation coefficient, in practice an elasticity: it measures the impact of price level changes on the change in wages (for example, unitary elasticity corresponds to total indexation, which means that a 10% increase in prices would result in a 10% increase in wages). We can express the growth rate differential for wages in France and Germany in terms of the growth rate differential for prices, weighted by the indexation coefficient, as follows:*

$$\frac{\Delta w_{FRt}}{w_{FRt}} - \frac{\Delta w_{GERt}}{w_{GERt}} = \left(a_{FR}\frac{\Delta IPC_{FRt}}{IPC_{FRt}} - a_{GER}\frac{\Delta IPC_{GERt}}{IPC_{GERt}}\right) + \left(\mu_{FRt} - \mu_{GERt}\right) \qquad (2)$$

The first term represents the impact of changes in the general level of prices on wages. The second represents the differences in changes for variables such as productivity and unemployment. In our theoretical framework, they are treated as a statistical residual (that is to say, in the variation in wages for the part that is not explained by price levels).

This exercise allows us to quantify the impact of differences in changes in prices on differences in changes in wages. We will use the different indices we have created and compare the results obtained with those from the unadjusted indices, which will give us an idea of the bias brought about where owner-occupier housing is not included in the price index. The results provide us with approximate orders of magnitude.

In order to carry out this exercise, we must choose values for the a_{FR} *and* a_{GER} *indexation coefficients. Our basic model uses unitary elasticities, namely* $a_{FR} = a_{GER} = 1$*, which correspond to a long-term elasticity. However, in order to gain a better understanding of the role of indexation, we also use medium-term elasticities, corresponding to a period of one year. In order to set the value of these parameters, we rely on the results of existing studies analysing the relationship between the general level of prices and wages in both countries. Numerous studies show a statistical relationship between the general level of prices and wages per capita for France. Cette, Chouard and Verdugo (2012), for example, obtain an indexation coefficient (cumulative over a year) of 60%, based on quarterly data, for the period 1982-2009 (indexation is substantially lower as of 1982; see also Desplatz, Jamet, Passeron and Romans, 2003). In the appendix, we replicate this study using data for the period 1982-2012, and we find similar results, namely an elasticity of 0.57. This leads us to choose 0.6 as a reference value for* a_{FR}.

There are fewer studies on the indexation of wages to prices in Germany,[1] *but the studies carried out by Peeters and den Riejer (2008, 2014) do offer an assessment. The authors estimate a structural wage equation, which gives elasticities of wages to prices of about 0.2. We take this value as a reference value for* a_{GER}.

We also use elasticities derived from wage equation estimates from macroeconomic models. For Germany, the European Central Bank (ECB) model estimate for the German block provides a value of 0.33. The MASCOTTE model provides a value of 0.5 for France. We also use these two values.[2]

1 *The wage equation estimate for Germany (equivalent to that presented in the appendix for France) is rendered problematic by the unavailability of long quarterly series (for estimating long-term relationships) and the change in regime which is likely to have occurred following the wage moderation policies applied in the first half of the 2000s.*
2 *See Vetlov (I.) and Warmedinger (T.) (2006).*

4| Conclusion

The competitiveness of the French economy, in which wages are a key component, is central to government concerns and has provoked intense debate in France. Recent years have shown strongly contrasting trends in wages in France and Germany. The cost of housing, which has risen sharply in France as opposed to the relative stagnation in Germany, is often cited to explain the differences in wage curves. The impact of housing costs on the cost of living and purchasing power of households can create pressure on wages. In this article we have tested this hypothesis by constructing indices of consumer prices that incorporate changes in housing expenditure and prices more extensively than the standard indices. On this basis, changes in house prices prove to be a key determinant of changes in wage differentials in France and Germany. In the current debate on economic policies to strengthen French competitiveness, this article confirms the importance that needs to be attached to housing policy.

References

Arrondel (L.), Savignac (F.) and Tracol (K.)
"Wealth and consumption: French households in the crisis", *International Journal of Central Banking*, forthcoming.

Barret (C.), Bonotaux (J.) and Magnien (F.) (2003)
"*La mesure des prix dans les domaines de la santé et de l'action sociale : quelques problèmes méthodologiques*", *Économie et Statistique*, No. 361, pp. 3-25.

Blackaby (D.) and Manning (A.) (1992)
"Regional earnings and unemployment – A simultaneous approach", *Oxford Bulletin of Economics and Statistics*, 54, pp. 481-501.

Blanchflower (D.) and Oswald (A.) (2013)
"Does high home-ownership impair the labor market?", Working Paper Series WP13-3, Peterson Institute for International Economics.

Bover (O.), Muellbauer (J.) and Murphy (A.) (1989)
"Housing, wages and UK labour markets", *Oxford Bulletin of Economics and Statistics* 51 (2), pp. 97-136.

Cameron (G.) and Muellbauer (J.) (2000)
"Earnings, unemployment, and housing: evidence from a panel of British regions" CEPR Discussion Papers 2404.

Campbell (J.) and Cocco (J.) (2007)
"How do house prices affect consumption? Evidence from micro data", *Journal of Monetary Economics*, Vol. 54(3), pp. 591-621.

Cette (G.), Chouard (V.) and Verdugo (G.) (2012)
"*Les effets du SMIC sur le salaire moyen*", *Économie et Statistique*, No. 448-449.

Chauvin (V.) and Damette (O.) (2010)
"*Effets de richesse : le cas français*", *Économie et Statistique*, No. 438-440.

Desplatz (R.), Jamet (S.), Passeron (V.) and Romans (F.) (2003)
"*La modération salariale en France depuis le début des années 1980*", *Économie et Statistique*, No. 367.

Eurostat (2012)
"Detailed technical manual on owner occupied housing for harmonised index of consumer prices."

Eurosystem household finance and consumption network (2013)
"The Eurosystem household finance and consumption survey", *ECB Statistics Paper Series*, No. 2.

Gale (W.) and Sabelhaus (J.) (1999)
"Perspectives on the household saving rate", *Brookings Papers on Economic Activity*, No. 1, (1999), pp. 181-224.

ILO, IMF, OECD, Eurostat, United Nations, World Bank (2004)
"Consumer price index manual: theory and practice", Geneva.

Lecat (R.) (2003)
"*La prise en compte des services de logement dans l'indice des prix à la consommation : une comparaison internationale*", *Bulletin de la Banque de France*, No. 115.

Oswald (A.) (1997)
"Thoughts on NAIRU", *Journal of Economic Perspectives*, Correspondence, 227-228.

Oswald (A.) (1999)
"The housing market and Europe's unemployment: a non-technical paper", *mimeo*.

Peeters (M.) and den Reijer (A.) (2008)
"On wage formation, wage development and flexibility: a comparison between European countries and the United States", Applied Econometrics and International Development, *Euro-American Association of Economic Development*, Vol. 8(1), pp. 59-74.

Peeters (M.) and den Reijer (A.) (2014)
"Coordination versus flexibility in wage formation: a focus on the nominal wage impact of productivity in Germany, Greece, Ireland, Portugal, Spain and the United States", *Applied Economics*, Vol. 46(7), pp. 698-714.

Vetlov (I.) and Warmedinger (T.) (2006)
"The German block of the ECB model", ECB Working Paper series, No. 654.

Winters (J.) (2009)
"Wages and prices: are workers fully compensated for cost of living differences?", *Regional Science and Urban Economics*, September, 39(5), pp. 632-643.

Appendix

1 | Construction of the adjusted indices: formulae

The imputed rents approach

Making the assumption that rent structures for tenants and owner-occupiers are the same, tenant expenditures are used to calculate the imputed expenditures of owners.

Weights of X are observed in the unadjusted CPI, calculated from rental expenditures alone (no owner-occupier imputations), and is equal to: X = *total expenditures* x *tenant proportion* where *total expenditures* = *tenant expenditures* + *owner expenditures*.

We can therefore estimate total expenditures using the following formula: *total expenditures* = X/*tenant proportion*.

To arrive at the aggregate value of adjusted indices, we recalculate the weights of expenditures associated with each item, taking into account the increased weights of the housing item, and then apply the changes in value of the index associated with each item.

The "National Accounting" adjustments use the ratio between actual rent expenditures and imputed rents obtained from national accounts data on household final consumption, according to the following formula: *adjusted weights* = *original weights* + *original weights* x (*imputed rents*/*actual rents*)

The acquisitions approach

We follow the approach proposed by Eurostat (2012, p. 36). The weights of the acquisitions of dwellings item p_{ACQ} are defined according to the following formula:

$$P_{AQC} = \frac{IMAQC}{DMLY} * P_{LOY}$$

where *IMAQ* is household investment in new dwellings and *DMLY* represent household expenditure on rents. We use household investment (institutional sector S. 14 + S. 15) on fixed capital (item P. 51) to approximate *IMAQ*. These data are taken from the national accounts. p_{LOY} is the price of housing, measured using the purchase prices of dwellings (existing or new) or with the construction costs index.

To arrive at the aggregate value of the adjusted indices, we recalculate the weights of expenditures associated with each item, taking into account this new item, and then apply the changes in the value of the index associated with each item.

2 | Data sources

Details on house price indices

France

• Existing: quarterly price index of second-hand dwellings – Metropolitan France – All items – Seasonal adjustment series – Insee.

• New: new housing price index, price of apartments – All France – *Commissariat général au développement durable* (CGDD – General Commission for Sustainable Development).

• Construction costs index: producer price index for construction of new residential buildings – Base 2010 – Insee.

Germany

• House price index – Prices for owner-occupied apartments in seven cities – Deutsche Bundesbank – Circulated by the OECD, publication "*House Price Indexes*".

• Construction costs index: Baupreisindizes: Deutschland, Berichtsmonat im Quartal – Destatis. These are the hedonic Laspeyres indices covering Germany.

Details on the harmonised price indices

We use monthly HICP series available on the Eurostat website, which are aggregated quarterly. The series of HICP aggregates are seasonally adjusted.

Details on the data used in wage equations

The data come from the national accounts. The wage measure is an average wage per capita, integrating all components of labour wages. Labour productivity, unemployment and hours worked are calculated for the whole economy and are available in the OECD's Economic Outlook. The series used were seasonally adjusted by data-producing agencies.

3| Wage indexation in France

We present estimates of indexation coefficients for France. These coefficients are obtained by estimating wage equations, namely the relationship between the average wage per capita in the economy and explanatory variables that economic theory has identified as having an effect on wages. Here we replicate one of the models used by Cette, Chouard and Verdugo (2011), using the most recent data (1970-2012). This model adopts a linear relationship between wages and these variables, and results in an autoregressive effect in the dependent variable:

$$\Delta w_t = a + \sum_{j=1}^{3} \gamma_j \Delta w_{t-j} + \sum_{j=0}^{3} a_j \Delta CPI_{t-j} + \beta_1 \, unemployment_t + \beta_2 \Delta \, unemployment_t$$
$$+ \varphi \Delta \, productivity_t + \partial \Delta \, hours_t + TRIM + \mu_t$$

where w is the average wage per employee, *CPI*, the consumer price index, *unemployment*, the rate of unemployment, *productivity*, labour productivity, $\Delta \, hours_t$ the increase in hours worked. *TRIM* are dichotomous variables that take into account the recurring quarterly specificities in changes in wages. μ_t is an error term. The variables are expressed in logarithms (except the unemployment rate) and transformed into first differences: for the variable x, the first difference is defined by $\Delta x_t = x_t - x_{(t-1)}$. We allow a dynamic impact of price changes, including three lagged price changes.[1] The results are used to calculate a long-term elasticity of wages with respect to the general price level, defined by:

$$\varepsilon = \frac{\sum_{j=0}^{3} a_j}{1 - \sum_{j=1}^{3} \gamma_j}$$

The results are given in Table A1. Column 1 shows the results for the period 1970-2012 and column 2 for 1982-2012. The long-run elasticities are 0.75 and 0.57 respectively. Our estimates confirm a gradual process of disindexation in France as of 1982. These results are consistent with other studies and corroborate the choice of the parameters used in Section 4.

1 *We have experienced it with the specifications including lags of the dependant variable and all the explanatory variables, obtaining results similar to those presented.*

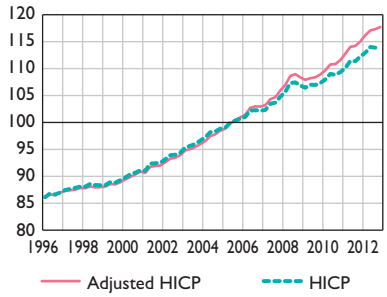
Table A1 Wage equations in France

	1970-2012	1982-2012		1970-2012	1982-2012
	1	2		1	2
d_wage_(t-1)	0.476*** (0.078)	0.456*** (0.085)	d_unemployment	-0.158 (0.113)	-0.155* (0.091)
d_wage_(t-2)	-0.151* (0.085)	-0.094 (0.093)	d_productivity	0.113** (0.049)	0.206*** (0.052)
d_wage_(t-3)	0.037 (0.068)	-0.023 (0.075)	d_hours	-0.003 (0.055)	-0.045 (0.057)
d_CPI_t	0.226*** (0.055)	0.152** (0.061)	T==2	-0.000 (0.001)	-0.000 (0.001)
d_CPI_(t-1)	0.237*** (0.062)	0.133** (0.066)	T==3	-0.001 (0.001)	0.000 (0.001)
d_CPI_(t-2)	0.006 (0.064)	0.040 (0.065)	T==4	0.001 (0.001)	0.001 (0.001)
d_CPI_(t-3)	0.012 (0.062)	0.053 (0.062)	constant	0.012*** (0.002)	0.010*** (0.003)
unemployment	-0.110*** (0.021)	-0.085*** (0.026)	Number of observations R2	169 0.976	125 0.956

*The numbers in brackets are standard deviations of the estimated coefficients. ***, ** and * next to a coefficient indicate that it is significant at the respective thresholds of 1%, 5% and 10%.* w *is the average wage per capita,* CPI *is the consumer prices index, unemployment is the unemployment rate, productivity is labour productivity, hours is the increase in working hours, and* TRIM *are dichotomous variables that take into account the recurring quarterly specificities in changes in wages. Variables preceded by "*d_*" indicate a first difference, and the expression in brackets* (t-x) *means the number* x *of lagged changes.*
Source: Author calculations.

French HICP, adjusted CN share Imputed rents

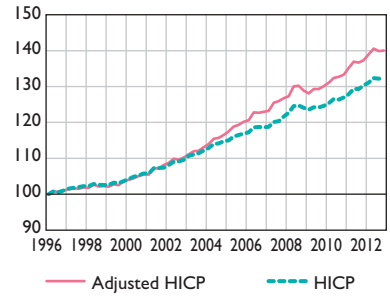
(Q1 1996 = 100)



Sources: Insee, Destatis, author calculations.

French HICP, adjusted acquisitions approach New apartments

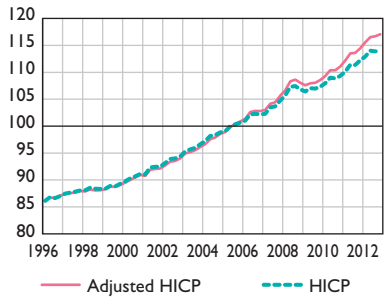
(Q1 1996 = 100)



Sources: Insee, Destatis, author calculations.

French HICP, adjusted share Germany Rents

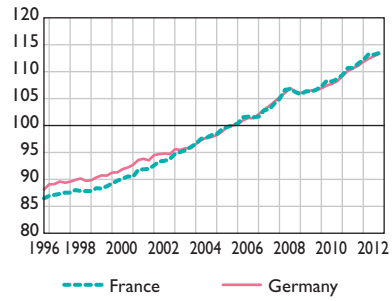
(Q1 1996 = 100)



Sources: Insee, Destatis, author calculations.

Evolution of French and German HICPs

(Q4 2005 = 100)



Sources: Insee, Destatis, author calculations.

Table A2 Evolution of HICPs adjusted according to the imputed rents approach

(base Q4 2005 = 100)

		France			Germany	
		HICP	Adjusted HICP		HICP	Adjusted HICP
			CN share	Share with owner rates		Share with owner rates
1996	T1	85.57	85.98	85.47	87.57	87.76
1996	T2	86.26	86.63	86.15	87.86	88.04
1996	T3	86.06	86.50	85.98	88.13	88.27
1996	T4	86.43	86.97	86.41	88.06	88.32
1997	T1	86.89	87.29	86.73	89.02	89.16
1997	T2	87.09	87.40	86.88	89.09	89.26
1997	T3	87.26	87.52	86.99	89.55	89.73
1997	T4	87.49	87.83	87.27	89.35	89.62
1998	T1	87.49	87.78	87.21	89.52	89.74
1998	T2	87.98	88.11	87.59	89.85	90.03
1998	T3	87.81	87.93	87.41	90.11	90.26
1998	T4	87.78	87.97	87.43	89.68	89.84
1999	T1	87.78	88.07	87.58	89.78	89.85
1999	T2	88.32	88.55	88.10	90.31	90.46
1999	T3	88.24	88.51	88.02	90.71	90.85
1999	T4	88.69	88.86	88.39	90.64	90.74
2000	T1	89.18	89.39	88.93	91.20	90.94
2000	T2	89.73	89.86	89.41	91.27	91.07
2000	T3	90.07	90.33	89.82	91.87	91.71
2000	T4	90.50	90.84	90.30	92.16	92.16
2001	T1	90.44	90.63	90.16	92.66	92.53
2001	T2	91.73	91.76	91.34	93.55	93.36
2001	T3	91.82	91.92	91.47	93.78	93.61
2001	T4	91.88	91.99	91.54	93.49	93.35
2002	T1	92.54	92.57	92.14	94.48	94.21
2002	T2	93.29	93.28	92.86	94.64	94.36
2002	T3	93.40	93.43	92.99	94.78	94.49
2002	T4	93.74	93.90	93.42	94.64	94.39
2003	T1	94.69	94.81	94.28	95.54	95.31
2003	T2	95.04	95.05	94.58	95.44	95.15
2003	T3	95.35	95.42	94.91	95.73	95.50
2003	T4	95.98	95.99	95.49	95.73	95.54
2004	T1	96.59	96.52	96.02	96.53	96.14
2004	T2	97.53	97.44	96.95	97.26	96.80
2004	T3	97.67	97.78	97.21	97.69	97.23
2004	T4	98.19	98.48	97.81	97.82	97.45
2005	T1	98.39	98.85	98.13	98.18	97.90
2005	T2	99.31	99.78	99.05	98.84	98.62
2005	T3	99.69	100.45	99.58	99.74	99.59
2005	T4	100.00	100.00	100.00	100.00	100.00

.../...

Table A2 Evolution of HICPs adjusted according to the imputed rents approach (continued)

(base Q4 2005 = 100)

		France			Germany	
		HICP	Adjusted HICP		HICP	Adjusted HICP
			CN share	Share with owner rates		Share with owner rates
2006	T1	100.35	101.42	100.44	100.20	100.41
2006	T2	101.51	102.73	101.68	100.96	101.16
2006	T3	101.62	102.97	101.87	101.36	101.57
2006	T4	101.52	102.96	101.82	101.32	101.55
2007	T1	101.63	103.19	102.02	102.08	102.38
2007	T2	102.79	104.31	103.15	102.94	103.18
2007	T3	102.99	104.66	103.44	103.57	103.75
2007	T4	104.08	105.93	104.64	104.43	104.62
2008	T1	104.99	106.95	105.58	105.23	105.65
2008	T2	106.58	108.59	107.21	106.05	106.68
2008	T3	106.74	108.97	107.51	106.94	107.55
2008	T4	106.18	108.39	106.93	106.18	106.88
2009	T1	105.72	107.92	106.49	106.05	106.82
2009	T2	106.33	108.22	106.91	106.32	106.88
2009	T3	106.25	108.37	106.97	106.48	106.99
2009	T4	106.63	108.92	107.46	106.55	106.97
2010	T1	107.26	109.67	108.17	106.91	107.40
2010	T2	108.28	110.77	109.24	107.41	107.97
2010	T3	108.14	110.83	109.23	107.74	108.29
2010	T4	108.63	111.56	109.87	108.23	108.84
2011	T1	109.39	112.74	110.95	109.23	110.10
2011	T2	110.69	114.04	112.25	110.09	111.03
2011	T3	110.63	114.19	112.33	110.58	111.51
2011	T4	111.51	115.04	113.19	111.08	112.08
2012	T1	112.21	116.19	114.25	111.84	112.82
2012	T2	113.26	117.09	115.20	112.40	113.35
2012	T3	113.13	117.33	115.33	112.86	113.88
2012	T4	113.45	117.70	115.69	113.29	114.29

Sources: Insee, Destatis, author calculations.

Table A3 Evolution of HICPs adjusted according to the net acquisitions approach – France

(Q4 2005 = 100)

		HICP	Adjusted HICP		
			Existing dwellings	New dwellings	Construction costs
1996	T1	85.57	81.06	83.20	84.98
1996	T2	86.26	81.70	83.93	85.53
1996	T3	86.06	81.50	83.63	85.33
1996	T4	86.43	81.87	84.03	85.80
1997	T1	86.89	81.87	84.35	86.05
1997	T2	87.09	82.18	84.54	86.39
1997	T3	87.26	82.23	84.44	86.54
1997	T4	87.49	82.49	84.75	86.75
1998	T1	87.49	82.25	84.67	86.55
1998	T2	87.98	82.74	85.43	86.96
1998	T3	87.81	82.60	84.96	86.79
1998	T4	87.78	82.67	85.08	86.94
1999	T1	87.78	82.43	84.92	87.01
1999	T2	88.32	83.00	85.49	87.54
1999	T3	88.24	83.05	85.30	87.47
1999	T4	88.69	83.56	86.23	87.67
2000	T1	89.18	84.38	86.54	88.36
2000	T2	89.73	84.95	86.89	88.87
2000	T3	90.07	85.39	87.38	89.17
2000	T4	90.50	85.88	87.85	89.92
2001	T1	90.44	86.16	87.72	89.87
2001	T2	91.73	87.43	89.28	91.12
2001	T3	91.82	87.64	89.11	91.25
2001	T4	91.88	87.85	89.96	91.25
2002	T1	92.54	88.62	90.43	92.01
2002	T2	93.29	89.48	91.41	92.70
2002	T3	93.40	89.81	91.20	92.86
2002	T4	93.74	90.37	91.67	93.21
2003	T1	94.69	91.19	92.46	93.99
2003	T2	95.04	91.82	93.17	94.52
2003	T3	95.35	92.33	93.30	94.77
2003	T4	95.98	93.21	94.10	95.41
2004	T1	96.59	93.94	94.84	95.92
2004	T2	96.59	93.94	94.84	95.92
2004	T3	97.53	95.15	96.03	97.22
2004	T4	98.19	96.57	96.91	97.74
2005	T1	98.39	97.21	97.76	97.96
2005	T2	99.31	98.49	98.86	98.81
2005	T3	99.69	99.29	99.28	99.11
2005	T4	100.00	100.00	100.00	100.00

.../...

Table A3 Evolution of HICPs adjusted according to the net acquisitions approach – France (continued)

(Q4 2005 = 100)

		HICP	Adjusted HICP		
			Existing dwellings	New dwellings	Construction costs
2006	T1	100.35	100.77	100.36	100.62
2006	T2	101.51	102.17	102.15	101.66
2006	T3	101.62	102.61	102.10	101.93
2006	T4	101.52	102.83	102.28	102.13
2007	T1	101.63	103.26	102.53	102.02
2007	T2	102.79	104.48	104.39	103.60
2007	T3	102.99	104.84	104.78	103.88
2007	T4	104.08	106.06	105.45	105.17
2008	T1	104.99	106.88	105.88	106.19
2008	T2	106.58	108.17	108.22	108.35
2008	T3	106.74	108.11	108.35	108.90
2008	T4	106.18	107.09	107.24	107.53
2009	T1	105.72	106.12	106.56	106.82
2009	T2	106.33	106.30	107.60	107.28
2009	T3	106.25	106.27	107.57	107.28
2009	T4	106.63	106.77	108.23	107.66
2010	T1	107.26	107.66	109.03	108.23
2010	T2	108.28	108.81	110.17	109.21
2010	T3	108.14	108.94	110.40	109.14
2010	T4	108.63	109.75	110.93	109.73
2011	T1	109.39	110.83	112.47	110.79
2011	T2	110.69	112.24	113.93	112.34
2011	T3	110.63	112.34	113.69	112.69
2011	T4	111.51	113.06	114.27	113.59
2012	T1	112.21	113.79	115.68	114.12
2012	T2	113.26	114.61	116.93	115.56
2012	T3	113.13	114.44	116.36	115.33
2012	T4	113.45	114.64	116.48	115.52

Sources: Insee, Destatis, author calculations.

Table A4 Evolution of HICPs adjusted according to the net acquisitions approach – Germany

(Q4 2005 = 100)

		HICP	Adjusted HICP	
			Existing dwellings	Construction costs
1996	T1	87.57	92.53	90.69
1996	T2	87.86	92.72	90.90
1996	T3	88.13	92.82	91.05
1996	T4	88.06	92.66	90.91
1997	T1	89.02	93.24	91.59
1997	T2	89.09	93.25	91.64
1997	T3	89.55	93.58	92.06
1997	T4	89.35	93.31	91.84
1998	T1	89.52	93.35	91.94
1998	T2	89.85	93.48	92.26
1998	T3	90.11	93.72	92.49
1998	T4	89.68	93.45	92.06
1999	T1	89.78	93.58	92.03
1999	T2	90.31	94.10	92.43
1999	T3	90.71	94.47	92.75
1999	T4	90.64	94.33	92.64
2000	T1	91.20	94.82	93.00
2000	T2	91.27	94.80	93.03
2000	T3	91.87	95.19	93.42
2000	T4	92.16	95.47	93.68
2001	T1	92.66	95.56	93.91
2001	T2	93.55	96.40	94.73
2001	T3	93.78	96.50	94.88
2001	T4	93.49	96.16	94.67
2002	T1	94.48	96.68	95.49
2002	T2	94.64	96.65	95.61
2002	T3	94.78	96.62	95.66
2002	T4	94.64	96.48	95.52
2003	T1	95.54	97.21	96.27
2003	T2	95.44	97.12	96.19
2003	T3	95.73	97.32	96.43
2003	T4	95.73	97.26	96.44
2004	T1	96.53	97.67	96.98
2004	T2	97.26	98.19	97.73
2004	T3	97.69	98.38	98.02
2004	T4	97.82	98.41	98.14
2005	T1	98.18	98.63	98.51
2005	T2	98.84	99.11	99.05
2005	T3	99.74	99.73	99.72
2005	T4	100.00	100.00	100.00
2006	T1	100.20	100.20	100.26
2006	T2	100.96	100.86	100.99
2006	T3	101.36	101.19	101.46
2006	T4	101.32	101.25	101.63
2007	T1	102.08	101.96	102.90
2007	T2	102.94	102.76	103.74
2007	T3	103.57	103.24	104.28
2007	T4	104.43	104.07	105.18
2008	T1	105.23	104.82	106.06
2008	T2	106.05	105.69	106.92
2008	T3	106.94	106.37	107.73
2008	T4	106.18	105.78	107.16
2009	T1	106.05	105.60	107.06
2009	T2	106.32	105.90	107.19
2009	T3	106.48	106.13	107.31
2009	T4	106.55	106.29	107.44
2010	T1	106.91	106.57	107.79
2010	T2	107.41	107.25	108.36
2010	T3	107.74	107.58	108.65
2010	T4	108.23	108.19	109.21
2011	T1	109.23	109.27	110.29
2011	T2	110.09	110.25	111.24
2011	T3	110.58	110.92	111.68
2011	T4	111.08	111.70	112.23
2012	T1	111.84	112.57	112.99
2012	T2	112.40	113.26	113.65
2012	T3	112.86	113.62	114.03
2012	T4	113.29	114.18	114.54

Sources: Insee, Destatis, author calculations.

Euro banknotes and coins in France in 2013

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The year 2013 saw a continuation of the main trends observed in previous years, both for banknotes and coins.

Against a backdrop of weak economic growth and the increased presence of private operators in the cash recycling industry, the flow of euro banknotes and coins handled by Banque de France and IEDOM branch counters declined with respect to 2012. Banknote outflows (withdrawals) fell by 2.2% in value to EUR 181.1 billion, while inflows (deposits) fell 1.7% to EUR 175.0 billion. In the case of coins, the decline was even more pronounced, with the value of withdrawals falling by 7.1% over the period to EUR 773 million, and the value of deposits by 7.0% to EUR 681 million.

Growth in net banknote issuance continued to slow: at 31 December 2013, a net total of 3.9 billion banknotes had been issued, or EUR 102.0 billion, representing a rise of 7.1% in volume and 6.3% in value over the year, compared with respective growth of 8.8% and 8.0% in 2012. Net coin issuance registered a similar slowdown: a net total of 17.1 billion coins were issued over the period, with a value of EUR 3.0 billion, representing a 5.1% rise in volume and a 3.2% rise in value compared with growth of 5.8% and 3.6% respectively in 2012.

Key words: currency in circulation, net issuance, deposits, withdrawals, coins, banknotes

JEL codes: E5, E50

1| 2013 saw a confirmation of previous trends in banknotes

One of the Banque de France's core tasks, as set out in the French Monetary and Financial Code, is to issue euro banknotes and maintain the quality of those in circulation.[1] In the French Overseas Departments and in the collectivities of Saint Pierre and Miquelon, Saint Barthelemy and Saint Martin, the Bank delegates this task to the *Institut d'émission des départements d'outremer* IEDOM – the French Overseas Departments' note-issuing bank). The data presented below include figures for the IEDOM.

1|1 Decline in banknote flows at Banque de France and IEDOM branch counters

In 2013, banknote outflows or withdrawals fell by 2.9% in volume (to 7.4 billion notes), and by 2.2% in value (to EUR 18.1 billion). Over the same period, inflows or deposits shrank by 2.5% in volume (to 7.2 billion notes), and by 1.7% in value (to EUR 175.0 billion).

This decline affected all banknote denominations, with the exception of the €50 (+1.3% for withdrawals, +1.2% for deposits) and the €200 (+1.2% for withdrawals, +0.4% for deposits). In the case of the €5 note, the first to be issued in the new "Europa" series, inflows and outflows remained relatively stable, confirming the success of its introduction (see Box below).

The fall in banknote flows was in line with the trend seen throughout the euro area:[2] deposits in the single currency area shrank by 0.9% in volume and by 2.2% in value, while withdrawals slipped back 0.6% in volume and 0.5% in value (see Table 1).

Table 1 2012/2013 change in value of banknote flows in France and the Eurosystem (excl. the Netherlands), 2012-2013

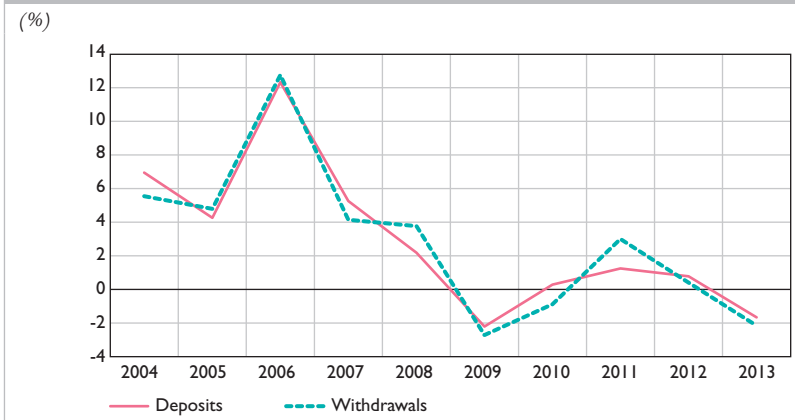
(in EUR billions, change in %)

		Banknote deposits	Change year-on-year	Banknote withdrawals	Change year-on-year
France	2013	175.0	-1.7	181.1	-2.2
	2012	177.9	0.8	185.0	0.4
Euro area	2013	1,050.5	-2.2	1,096.2	-0.5
	2012	1,074.5	1.3	1,101.9	-1.1

Sources: Banque de France and European Central Bank (ECB).

1 *Article L141-5 of the French Monetary and Financial Code.*
2 *Data on the change in banknote withdrawals and deposits in the Eurosystem do not include figures for the Netherlands; due to a change in methodology (inclusion of auxiliary banknote deposits), figures for the Netherlands show a sharp rise in flows.*

Chart 1 Growth in value of flows in France, 2004-2013



Sources: Banque de France and ECB.

After rising sharply prior to 2008 (increase of 34.8% in the value of withdrawals and deposits between 2003 and 2008), banknote flows have tended to stabilise in France: from 2008 to 2013, withdrawals and deposits fell by 2.4% and 1.6% respectively (see Chart 1).

This trend can be attributed to two factors:

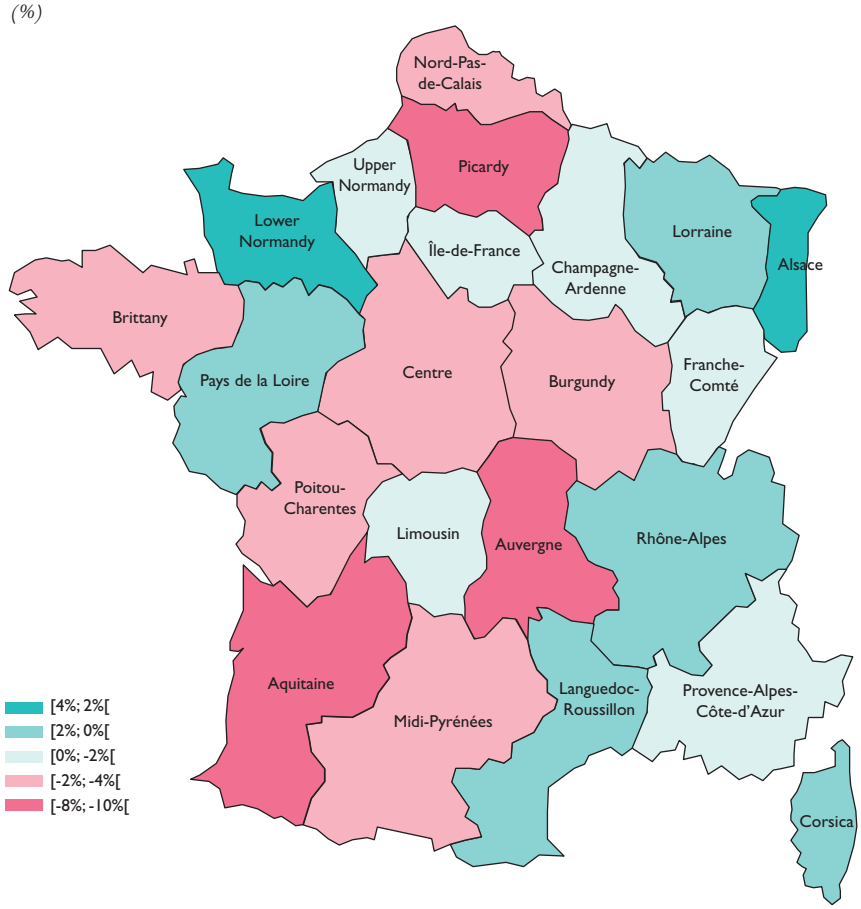
- the economic crisis which, despite prompting a temporary rise in demand for banknotes for hoarding purposes,[3] weighed on overall demand for banknotes for transaction purposes;

- the increased presence of external recyclers in the market (see Glossary), helped by the adoption in 2005 of the European "Framework for the detection of counterfeits and fitness sorting of euro banknotes by credit institutions and professional cash handlers". The introduction of tighter rules governing withdrawals and deposits initially prompted a sharp rise in the volume of banknotes handled by central bank counters in 2006. However, it subsequently enabled private operators such as credit institutions, cash-in-transit companies and merchants to enter the recycling market: at end-2013, there were 6,602 bank branches distributing recycled banknotes, a rise of 8.3% with respect to end-2012.

3 *In October 2008, the month following the collapse of Lehman Brothers, withdrawals of €500 notes were 2.6 times greater than in the same month in 2007, withdrawals of the €200 were 1.8 times greater and withdrawals of the €100 were 1.3 times greater. This illustrates the appeal of high-value notes for hoarding purposes in the event of a shock to the financial system.*

Growth in value of deposits at Banque de France branches between 2012 and 2013

(%)



Source: Banque de France.

A breakdown of banknote flows by region confirms the impact of private operators: in the three regions which saw the greatest decline in banknote flows (Aquitaine, Auvergne and Picardy), the downturn can be attributed to the entrance of major banking groups into the banknote recycling market. The total value of deposits at Banque de France counters fell by 9.6% in Aquitaine, 9.0% in Auvergne and 8.6% in Picardy, while withdrawals shrank by 9.5% in Auvergne, 9.4% in Aquitaine and 7.6% in Picardy.

Elsewhere in France, nearly all regions reported a decline in the volume and value of banknote flows, although the extent of the downturn varied; only Lower Normandy and Alsace saw a notable rise in banknote deposits (+2.5% in Lower Normandy, +2.0% in Alsace) and withdrawals (+4.7% and +2.0% respectively).

1|2 Net banknote issuance in France: a preponderance of small-value notes

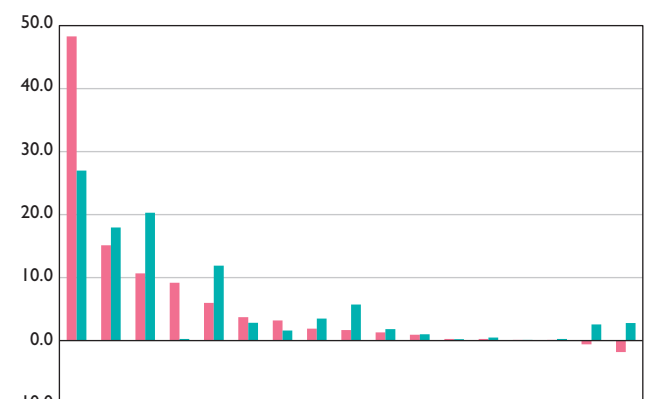
Since euro banknotes and coins were introduced in 2002, the concept of national currency circulation has become obsolete and has been superseded by the notion of euro area circulation. This corresponds to the total number of euro banknotes and coins present in the economy, including those outside the euro area,[4] and is measured as the difference between the total number put into circulation and the total number withdrawn from circulation.

At national central bank (NCB) level, the concept used is that of net issuance,[5] which differs from circulation in that it does not include migrations of coins and notes from one euro area country to another.

To illustrate the scale of cross-border migrations, at end-2013, banknote inflows at 15 of the 17 Eurosystem NCBs had exceeded the number of notes issued since 2002, for at least one denomination. In the case of the Austrian and Portuguese central banks, the total value of all banknote denominations deposited exceeded the total value of notes issued since the introduction of the euro (see Chart 2).

Chart 2 Share of Eurosystem NCBs in total value of net issuance and ECB capital keys

(%)



	DE	IT	FR	LU	ES	GR	IE	BE	NL	FI	SK	CY	SI	MT	EE	PT	AT
Net issuance	48.3	15.1	10.7	9.2	6.0	3.7	3.2	1.9	1.7	1.3	0.9	0.2	0.2	0.1	0.1	-0.6	-1.8
Capital key	27.0	17.9	20.3	0.3	11.9	2.8	1.6	3.5	5.7	1.8	1.0	0.2	0.5	0.1	0.3	2.5	2.8

Source: ECB.

4 *According to European Central Bank estimates, between 14% and 25% of euro banknotes are held outside the Eurosystem, underscoring the truly international status of the single currency.*
5 *In the case of national central banks, net issuance is defined as the sum of all withdrawals at its counters minus deposits since it joined the euro.*

BOX

Introduction of the new €5 banknote

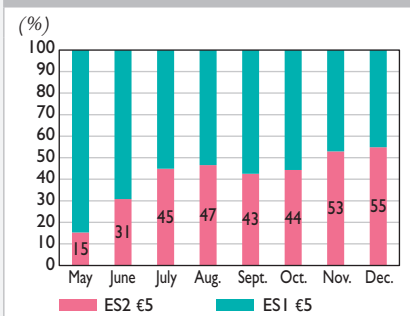
On 2 May 2013, the Eurosystem launched the new €5 banknote, the first denomination in the Europa series of euro notes (also known as ES2) which will gradually replace those currently in circulation.[1]

The new series has been in the pipeline for some time, and is intended to shore up public confidence in euro banknotes and coins; although visually similar to the old version, the new €5 incorporates enhanced security features which make it harder to counterfeit. It is also easier to use for the visually impaired, and has been coated with a layer of varnish to make it more resistant to wear and tear.

Thanks to substantial preparations, the roll-out of the new €5 banknote went smoothly, with no major incidents recorded: inflows and outflows at Banque de France counters remained stable, in a sign that the general public had no difficulty switching from the old version (known as ES1). The new note quickly became widely used; according to sorting data, at end-2013, the ES2 note accounted for 55% of the total volume of €5 inflows in France (see Chart).

The success of the ES2 €5 note paves the way for the gradual introduction of the rest of the series. Subsequent notes will be introduced at the rate of one a year, with the launch of the €10 scheduled for 23 September 2014.

Share of ES2 €5 in total volume of €5 notes sorted in France in 2013



Source: Banque de France.

1 *For more details on the launch of the new €5, see* Innovation at work: introducing the first banknote in the Europa series, *by Aurélie Marchand and Enda Palazzi (2013),* QSA32, *Winter 2013-2014, pp. 113-135.*

At 31 December 2013, net issuance in France stood at 3.9 billion notes, representing a total value of EUR 102.0 billion (see Table 2). Due to the structure of French net issuance, which is characterised by a high proportion of €10 and €20 notes, this accounted for 23.8% of the total volume of Eurosystem net issuance (16.5 billion notes), but just 10.7% of the total value (EUR 956.2 billion) (see Charts 3).

The share of €20 notes in French net issuance is particularly high due to the large number that are distributed through ATMs:[6] in value terms, the €20 note accounted for 49.2% of total net issuance in France in 2013 (compared with 6.5% of total Eurosystem net issuance), outstripping the €50 note (29.5% of net issuance in France compared with 36.4% of total Eurosystem net issuance) (see Chart 4.)

6 *According to a June 2010 survey by the Banque de France of the main French credit institutions, nearly half of all banknotes distributed to the general public via ATMs are €20.*

Table 2 Net banknote issuance at 31 December 2013, France and Eurosystem

(in millions of banknotes, EUR billions)

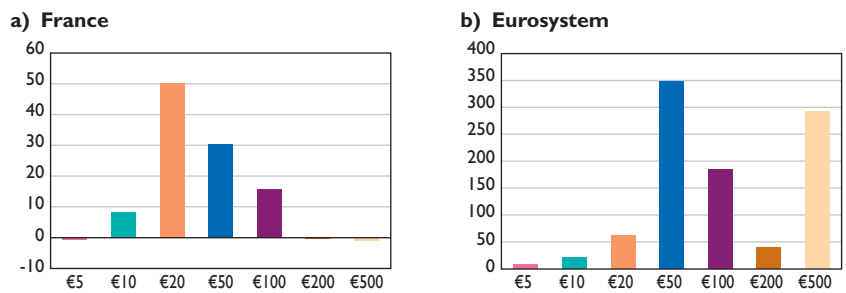
	France		Eurosystem	
	Volume	Value	Volume	Value
€5	-157.2	-0.8	1,672.4	8.4
€10	829.8	8.3	2,155.6	21.6
€20	2,507.3	50.1	3,088.8	61.8
€50	602.2	30.1	6,962.8	348.1
€100	155.8	15.6	1,850.0	185.0
€200	-1.9	-0.4	198,9	39.8
€500	-1.9	-1.0	583.1	291.6
Total	**3,934.0**	**102.0**	**16,511.7**	**956.2**

Sources: Banque de France and ECB.

As a result, the average value of notes withdrawn at Banque de France branch counters is lower than in the rest of the Eurosystem (see Chart 5).

Charts 3 Net issuance by denomination at 31 December 2013, France and Eurosystem

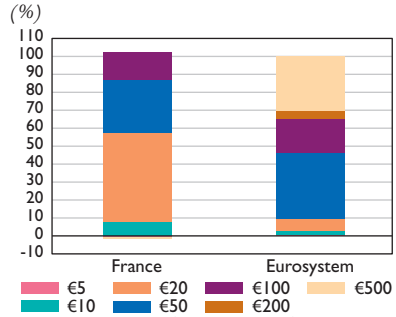
(in billions of euros)



Sources: Banque de France and ECB.

Chart 4 Share of different denominations in value of net issuance, France and Eurosystem

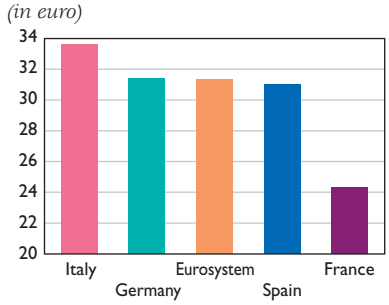
(%)



Sources: Banque de France and ECB.

Chart 5 Average value of banknotes withdrawn at main NCB branches in 2013

(in euro)



Source: ECB.

1|3 Net issuance in France is continuing to slow, despite a strong rise in issuance of the €50

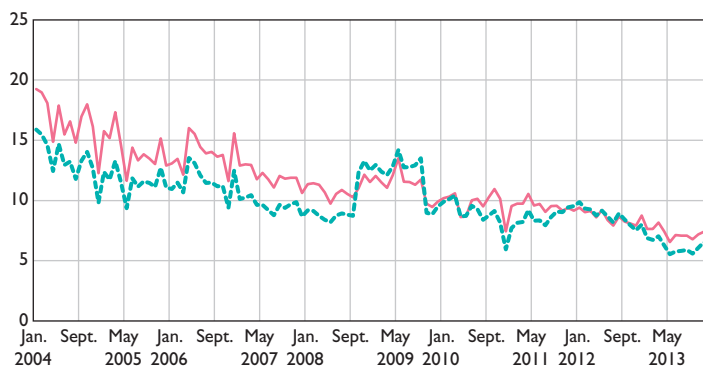
Due to the existence of cross-border migrations within the single currency bloc, the total value of deposits of certain banknote denominations exceeds the total value of withdrawals: this has been the case for the €5 since August 2006, the €200 since March 2013 and the €500 since April 2013.

The year 2013 confirmed the trend towards a slowdown in growth in issuance, both in France and throughout Europe; net issuance rose by 7.1% in volume and 6.3% in value in France year-on-year, while in the Eurosystem it increased by 5.3% and 4.8% respectively (see Charts 6).

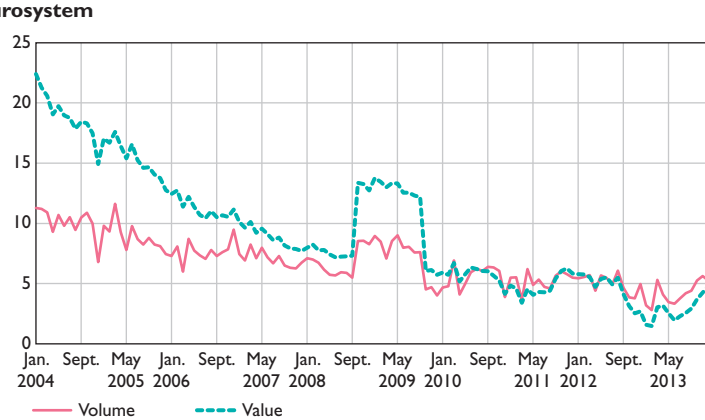
Charts 6 Rates of growth in net banknote issuance since 2004, France and Eurosystem

(year-on-year)

a) France



b) Eurosystem

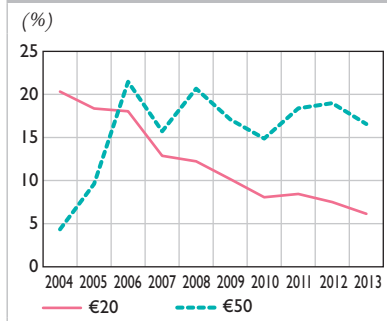


Sources: Banque de France and ECB.

In France, the €50 note saw the strongest growth (+16.6%, see Chart 7), followed by the €10, €20 and €100 (+6.4%, +6.1% and +5.3% respectively), whereas for the €5, €200 and €500, total deposits at Banque de France branch counters exceeded total withdrawals.

This contrasts with the picture for the euro area as a whole, where the biggest rises were seen in the €100 (+8.4%), €50 (+8.2%) and €200 (+8.0%).

Chart 7 Rate of growth in value of net issuance of €20 and €50 notes, France



Source: Banque de France.

2| Sharp drop in flows of coins and moderate growth in net issuance

The Banque de France does not have the same responsibilities for coins as it does for banknotes. Whereas the Treaty on the Functioning of the European Union grants the European Central Bank (ECB) and national central banks the exclusive right to issue banknotes, the task of issuing euro coins still falls entirely to national governments.[7]

In practice, the French Treasury is assisted by three operators:

- the Monnaie de Paris (Paris Mint), a government-owned industrial and commercial body which manufactures euro coins;

- the Banque de France, which puts the coins into circulation and withdraws them from use on behalf of the Treasury in metropolitan France,[8] and advises the Treasury on its coin production schedule;

- the IEDOM, which puts coins into circulation and withdraws them on behalf of the Treasury, in those areas in which it operates.

7 *However, the ECB still retains a degree of control over the volume of coins put into circulation, as Article 106, paragraph 2 of the Treaty on the Functioning of the European Union stipulates that "Member States may issue euro coins subject to approval by the European Central Bank of the volume of the issue".*
8 *The terms and conditions of this role are set out in an agreement signed by the Banque de France with the French government in 1994.*

Table 3 Change in flows of euro coins at NCB branch counters, France and Eurosystem

(in EUR millions, change in %)

		Coins deposited at branch counters	Change year-on-year	Coins withdrawn at branch counters	Change year-on-year
France	2013	681	-7.0	773	-7.1
	2012	732	0.3	832	-0.7
Euro area	2013	6,474	-0.3	7,022	-0.8
	2012	6,495	-1.3	7,081	-4.1

Sources: Banque de France and ECB.

2|1 Sharp drop in coin flows

The year 2013 was marked by a sharp drop in flows of coins, accelerating the trend observed in recent years: a total of 1.07 billion coins with a value of EUR 681 million were deposited at Banque de France counters over the year, representing a decline of 8.1% in volume and of 7.0% in value, while withdrawals fell by 7.0% and 7.1% respectively to 1.90 billion coins or EUR 773 million.

In the euro area as a whole, coin flows rose in volume over the period (+4.6% for inflows, +1.8% for outflows), but stagnated in value terms (–0.3% for inflows and –0.8% for outflows), due to a rise in flows of copper coins and a fall in flows of the higher denomination coins (see Table 3).

2|2 Weak growth in net coin issuance

At 31 December 2013, net issuance in France totalled 17.1 billion coins, with an equivalent value of EUR 3.0 billion. This accounted for 16.1% of net European issuance by volume (106.0 billion coins), and 12.3% by value (EUR 24.2 billion).

The breakdown of issuance by coin denomination was broadly the same in France as in the rest of Europe, with the exception that the average coin value was slightly lower. Copper-coloured euro coins (1 cent, 2 cent and 5 cent) accounted for 69.8% of the total volume of net issuance in France (compared with 62.7% of coins in circulation in Europe), exceeding the share of gold-coloured coins (10 cent, 20 cent and 50 cent) which was 22.9% in France (26.3% of net issuance in Europe), as well as that of the bi-colour coins (7.2% of net issuance in France and 11.0% of coins in circulation in Europe).

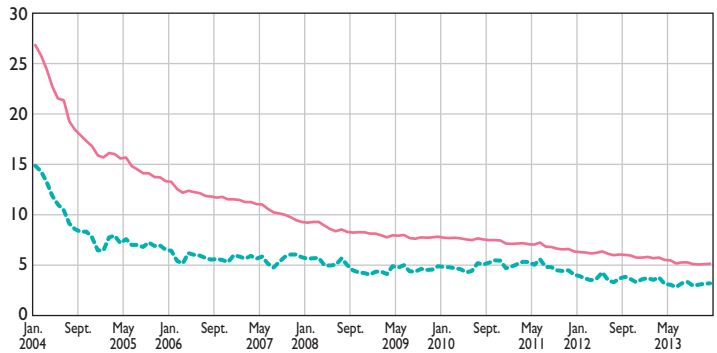
Year-on-year, net coin issuance in France grew by 5.1% in volume and 3.2% in value, against 3.8% and 2.3% respectively for the single currency bloc.

This confirms the overall trend of declining growth in net issuance, both for France and for the broader euro area. From 2004 to 2008, net issuance in France rose at an average annual rate of 11.6% in volume and 5.8% in value, compared with 6.4% and 4.1% in the period 2009 to 2013 (see Charts 8).

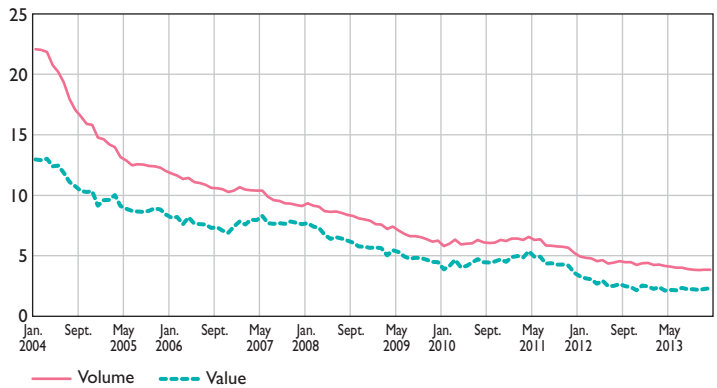
Charts 8 Change in rate of growth in net coin issuance since 2004, France and Eurosystem

(year-on-year)

a) France



b) Eurosystem



Sources: Banque de France and ECB.

Table 4 Change in net coin issuance, France and Eurosystem, 2012-2013

(in EUR millions, change in %)

	France			Euro area		
	2012	2013	Change year-on-year	2012	2013	Change year-on-year
€0.01	48	51	6.8	262	277	5.8
€0.02	79	84	5.7	411	432	5.1
€0.05	124	130	5.0	828	857	3.5
€0.1	192	200	4.3	1,241	1,272	2.5
€0.2	250	257	2.9	1,915	1,951	1.9
€0.5	306	313	2.2	2,670	2,716	1.7
€1	527	523	-0.9	6,465	6,513	0.7
€2	1,362	1,423	4.5	9,866	10,189	3.3
Total value	**2,889**	**2,981**	**3.2**	**23,658**	**24,208**	**2.3**

Sources: Banque de France and ECB.

In France, as in the rest of the euro area, the growth in the volume of net issuance is essentially driven by small-denomination coins. Thus, at end-2013, copper euro coins accounted for 81.1% of the total growth in net issuance in France and 79.6% of the total growth in Europe. In terms of value, however, growth essentially derived from the rise in net issuance of the €2 coin, as net issuance of the €1 is declining (see Table 4).

Glossary

Currency in circulation

Since the introduction of euro banknotes and coins on 1 January 2002, this concept has applied only at the level of the Eurosystem.

It corresponds to all euro area banknotes and coins in circulation, including outside the euro area. Currency in circulation is thus measured as the difference between the total amount of banknotes and/or coins put into circulation and that of banknotes and/or coins withdrawn from circulation by all the Eurosystem central banks since joining the euro area.

At national level, the concept of "net issuance" is used.

Capital key

The ECB's capital is provided by the national central banks (NCBs) of all European Union Member States.

The NCBs' shares in this capital are calculated using a key which reflects the respective country's share in the total population and gross domestic product of the EU. These two determinants have equal weighting. The ECB adjusts the shares every five years and whenever a new country joins the EU.

Net issuance

Net issuance is defined as the cumulative sum of the difference between outgoing (withdrawals) and incoming (deposits) flows at each NCB's branches since the country joined the euro. At Eurosystem level, the sum of the net issuance of each member country is equal to the currency in circulation.

Eurosystem

A body comprising the European Central Bank and the NCBs of the EU Member States which have joined the euro. At 31 December 2013, the Eurosystem was made up of 17 countries. Lithuania joined on 1 January 2014.

Withdrawals/outflows

Flows of banknotes/coins withdrawn from NCB branches and ultimately delivered to the general public.

External recycling

As part of its basic task of managing banknotes and coins, the Banque de France systematically sorts all notes deposited at its branch counters to ensure they are of adequate quality and detect any counterfeits.

In the case of external recycling, banknotes are authenticated and checked for quality by an authorised operator (credit institution, cash-in-transit companies, merchants), before being put back into circulation via ATMs.

The "Framework for the detection of counterfeits and fitness sorting of euro banknotes by credit institutions and professional cash handlers", adopted in Europe in 2005, created a legal framework for the activities of external cash recyclers. In France, parties wishing to carry out this type of activity must sign an agreement with and are supervised by the Banque de France.

Net outflows

This is the difference between outflows and inflows for a given period and given geographical area. Since the introduction of the euro, the cumulative sum of net national outflows has been equal to that country's net issuance.

Deposits/inflows

Flows of banknotes/coins deposited at NCB branches.

Quarterly Selection of Articles

Winter 2010-2011

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

Spring 2011

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

Summer 2011

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

Autumn 2011

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

Winter 2011-2012

– The cost of business credit by firm category
– Companies in France in 2010: a mixed picture
– Payment periods in 2010: the efforts made since the implementation of the LME have lost momentum
– France's national economic wealth showed a marked rebound in 2010 due to higher land prices
– French overseas territories and the euro
– Summary of the international workshop on microfinance organised by the Banque de France on 8 July 2011
– Forecasting the business cycle – Summary of the 8th International Institute of Forecasters workshop hosted by the Banque de France on 1-2 December 2011 in Paris
– Fiscal and monetary policy in the aftermath of the financial crisis – Summary of the BDF/EABCN/EJ/PSE conference on 8-9 December 2011

Spring 2012

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

Summer 2012

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

Autumn 2012

– Current account imbalances in the euro area: competitiveness or demand shock?
– Non-residents' equity holdings in French CAC 40 companies at end-2011
– New housing loans to households: recent trends
– Insurance institutions' investments at end-2011

Winter 2012-2013

– French companies in 2011: expanding activity but shrinking profits
– The financial situation of the major listed groups remained sound in the first half of 2012 despite a difficult environment
– Securitisation in France
– Equilibrium exchange rate and competitiveness within the euro area
– Macroeconomic and financial vulnerability indicators in advanced economies
– The labour market: institutions and reforms

Spring 2013

– Monetary and credit developments in 2012 – Credit distribution grew more quickly in France than in the euro area
– France's inward foreign direct investment from 2005 to 2011
– Assisted microcredit – Summary of the symposium organised by the Banque de France on 12 December 2012
– Oil and the macroeconomy – Summary of the Banque de France workshop on 14 November 2012

Summer 2013

– Profits of CAC 40 companies: what contribution does foreign direct investment income make? An assessment of the period 2005-2011
– Access to credit of SMEs and MTEs: decline in supply or lower demand? Lessons learned from a new quarterly business survey
– Firm competitiveness: summary report on the CompNet conference Banque de France – 20 and 21 September 2012
– French investment funds during the crisis (2008-2012)
– Wage dynamics and current account rebalancing in the euro area

Autumn 2013

– The economic slowdown took a toll on SMEs' profits and investments in 2012
– Globalisation and labour market outcomes: an overview of the conference organised by the Banque de France on 16 and 17 May 2013
– Insurance institutions' investments at end-2012
– Non-residents holdings of French CAC 40 shares at end-2012
– The IMF and management of capital flows: the long road towards a pragmatic approach

Winter 2013-2014

– How do VAT changes affect inflation in France?
– Securitisation in France: recent developments
– Financial situation of the major listed groups in H1 2013: faltering growth coupled with debt reduction
– The performances of French firms deteriorated in 2012 but they consolidated their financial structures
– Innovation at work: introducing the first banknote in the Europa series

Spring 2014

– International adjustment and rebalancing of global demand: where do we stand?
– The labour market: institutions and reforms — Summary of the 2nd labour market conference organised by the Aix-Marseille School of Economics and the Banque de France on 16 and 17 December 2013
– International workshop on algorithmic and high-frequency trading: a brief summary

Other publications available in English

Freely downloadable from the Banque de France's English website

(http://www.banque-france.fr/en/publications/publications.html)

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- Financial Stability Review
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- **Financial Stability Review**
  – OTC derivatives: new rules, new actors, new risks (April 2013)
  – Macroprudential policies: implementation and interactions (April 2014)
- **Documents and Debates No. 3**
  "Financial crisis – Economic crisis"
- **Banque de France 2013 Annual Report**
  http://www.banque-france.fr/en/publications/annual-report-banque-de-france.html
- **The French balance of payments and international investment position – Annual Report 2012**
  http://www.banque-france.fr/en/economics-statistics/banking-and-financial-activity/frances-balance-of-payments/the-french-balance-of-payments-and-international-investment-position-annual-report.html
- **The Observatory for Payment Card Security – Annual Report 2012**
  http://www.banque-france.fr/observatoire/home_gb.htm
- **Focus No. 10**
  "The dangers linked to emergence of virtual currencies: the exemple of bitcoins"
- **Occasional Papers – February 2014**
  Macroprudential framework: key questions applied to the French case

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Nota bene

For the first time in this publication, France's balance of payments (BoP) statistics are compiled in accordance with the sixth edition of the Balance of Payments Manual (BPM6) of the International Monetary Fund.
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)

	2014						
	Jan.	Feb.	March	April	May	June	July
Changes in production from the previous month [a)]							
Total manufacturing	**6**	**9**	**5**	**3**	**0**	**3**	**2**
Food products and beverages	4	4	10	5	3	6	10
Electrical, electronic and computer equipement and other machinery	9	7	4	3	-5	4	-2
Automotive industry	-3	4	-2	-4	-13	-1	7
Other transport equipment	12	4	7	3	-13	8	-4
Other manufacturing	6	13	3	3	3	1	1
Production forecasts [a)]							
Total manufacturing	**5**	**2**	**4**	**0**	**7**	**7**	**-1**
Food products and beverages	8	8	9	7	9	14	8
Electrical, electronic and computer equipement and other machinery	2	4	6	1	6	2	2
Automotive industry	4	-1	4	-1	8	14	5
Other transport equipment	3	5	1	-1	15	-3	-2
Other manufacturing	7	3	4	1	6	6	-2
Changes in orders from the previous month [a)]							
Total manufacturing	**5**	**6**	**3**	**3**	**3**	**2**	**3**
Foreign	6	5	4	2	4	0	3
Order books [a)]							
Total manufacturing	**1**	**3**	**3**	**2**	**3**	**1**	**1**
Food products and beverages	-5	-4	-3	-4	-2	-1	-2
Electrical, electronic and computer equipement and other machinery	3	4	5	0	-1	-3	-9
Automotive industry	-30	-21	-14	-20	-10	-8	-6
Other transport equipment	49	46	47	48	49	49	48
Other manufacturing	3	4	2	4	3	-1	2
Inventories of finished goods [a)]							
Total manufacturing	**3**	**2**	**2**	**3**	**2**	**3**	**3**
Food products and beverages	2	2	-1	3	2	-4	0
Electrical, electronic and computer equipement and other machinery	7	5	5	8	5	8	5
Automotive industry	-1	-2	0	0	-2	-4	5
Other transport equipment	5	6	6	6	9	5	9
Other manufacturing	2	2	2	2	1	4	3
Capacity utilisation rate [b)]							
Total manufacturing	**76.1**	**76.5**	**76.1**	**76.4**	**76.0**	**76.0**	**75.8**
Staff levels (total manufacturing) [a)]							
Changes from the previous month	0	0	1	-1	-1	0	0
Forecast for the coming months	-2	-1	1	-2	-1	-1	-3
Business sentiment indicator [c)]							
	99	**99**	**98**	**97**	**97**	**97**	**96**

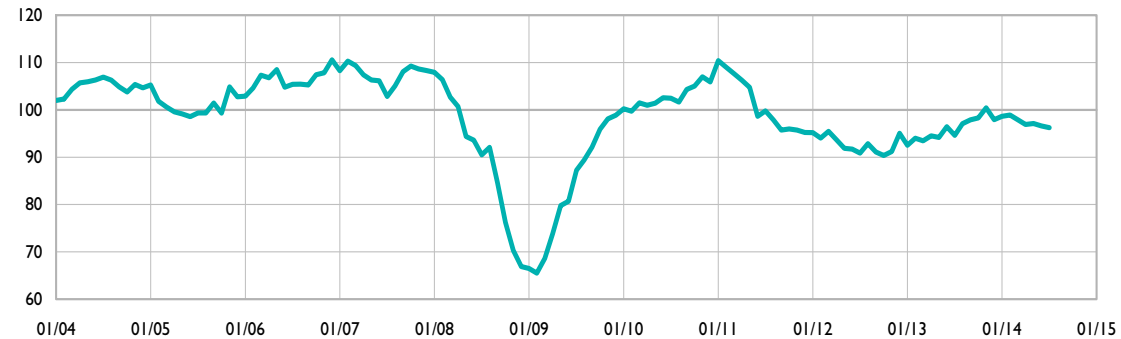
a) Data given as a balance of opinions. Forecast series are adjusted for bias when it is statistically significant.
b) Data given as a percentage.
c) The indicator summarises industrial managers' sentiment regarding business conditions. The higher the indicator is, the more positive the assessment. The 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 2014*

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

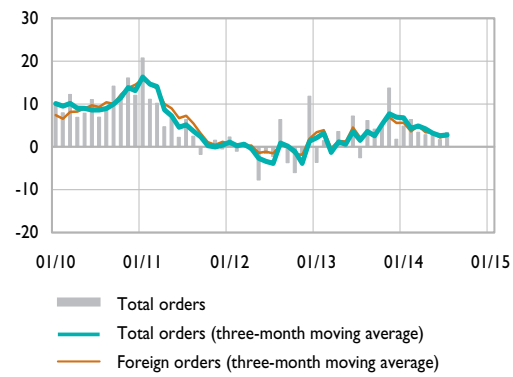
Business sentiment indicator

(100 = 1981 – last value)



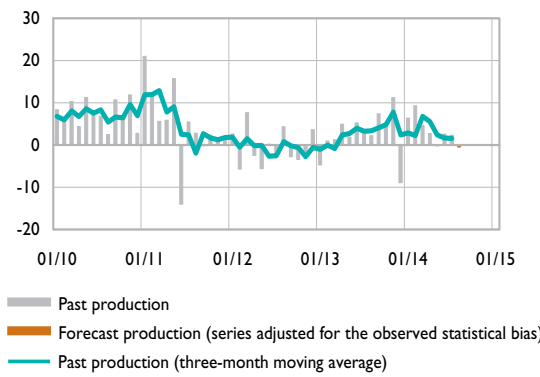
Orders [a)]

(balance of opinions; monthly change)



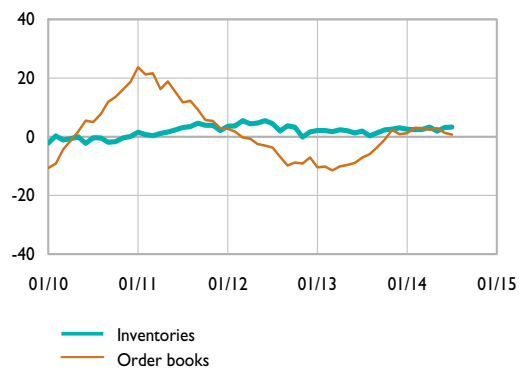
Production [a)]

(balance of opinions; monthly change)



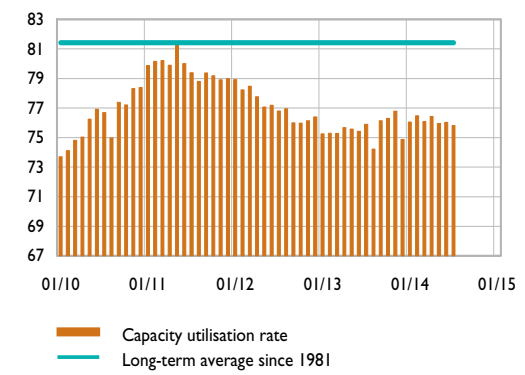
Inventories and order books [a)]

(balance of opinions; compared to levels deemed normal)



Capacity utilisation rate [a)]

(%)



a) Manufacturing.
Source: Banque de France.

Produced 20 August 2014

Table 3
Consumer price index [a)]

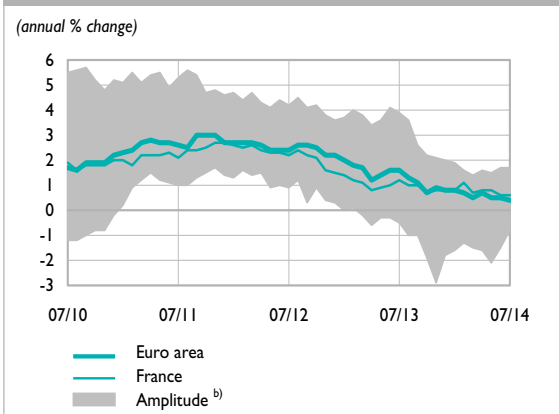
(annual % change)

	2013		2014						
	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July
France	0.8	0.8	0.8	1.1	0.7	0.8	0.8	0.6	0.6
Germany	1.6	1.2	1.2	1.0	0.9	1.1	0.6	1.0	0.8
Italy	0.7	0.7	0.6	0.4	0.3	0.5	0.4	0.2	0.0
Euro area	0.9	0.8	0.8	0.7	0.5	0.7	0.5	0.5	0.4
United Kingdom	2.1	2.0	1.9	1.7	1.6	1.8	1.5	1.9	1.6
European Union	1.0	1.0	0.9	0.8	0.6	0.8	0.6	0.7	0.6
United States	1.2	1.5	1.6	1.1	1.5	2.0	2.1	2.1	2.0
Japan	1.6	1.6	1.4	1.5	1.6	3.4	3.7	3.6	na

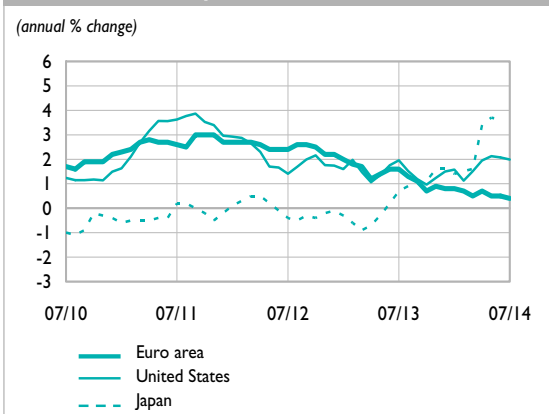
(annual average) *(monthly % change)*

	2011	2012	2013	2014					
				Feb.	March	April	May	June	July
France	2.3	2.2	1.0	0.6	0.5	0.0	0.0	0.0	-0.4
Germany	2.5	2.1	1.6	0.5	0.3	-0.3	-0.3	0.4	0.3
Italy	2.9	3.3	1.3	-0.3	2.2	0.5	-0.1	0.1	-2.1
Euro area	2.7	2.5	1.4	0.3	0.9	0.2	-0.1	0.1	-0.7
United Kingdom	4.5	2.8	2.6	0.6	0.2	0.3	-0.1	0.2	-0.4
European Union	3.1	2.6	1.5	0.3	0.7	0.2	-0.1	0.1	-0.5
United States	3.2	2.1	1.5	0.4	0.6	0.3	0.3	0.2	0.0
Japan	-0.3	0.0	0.4	0.0	0.3	2.1	0.4	-0.1	na

France and the euro area



International comparisons



a) Harmonised indices except for the United States and Japan (national indices).
b) Gap between the extreme values of harmonised price indices observed in the euro area (changing composition).

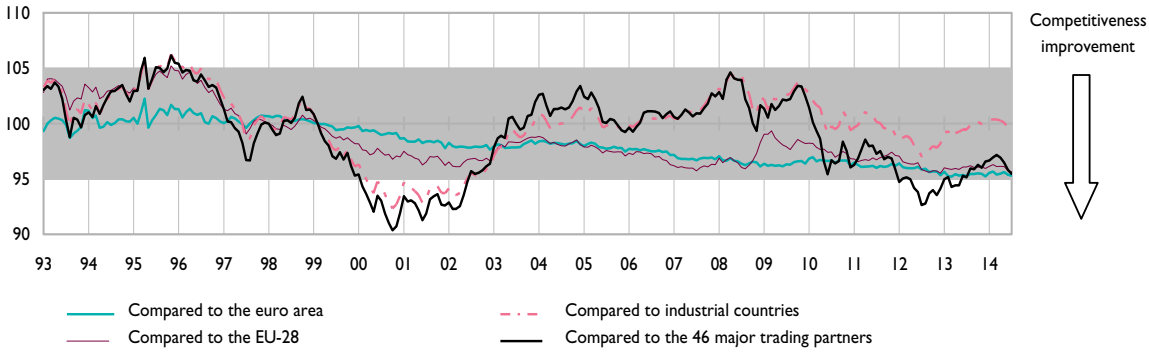
Sources: National data, Eurostat.

Produced 20 August 2014

Table 4
The competitiveness of France's economy

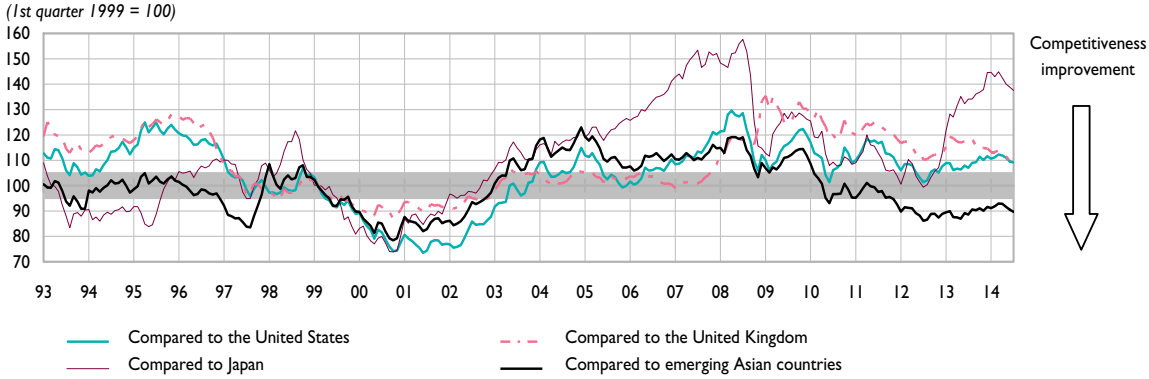
Indicators deflated by consumer prices

(1st quarter 1999 = 100)



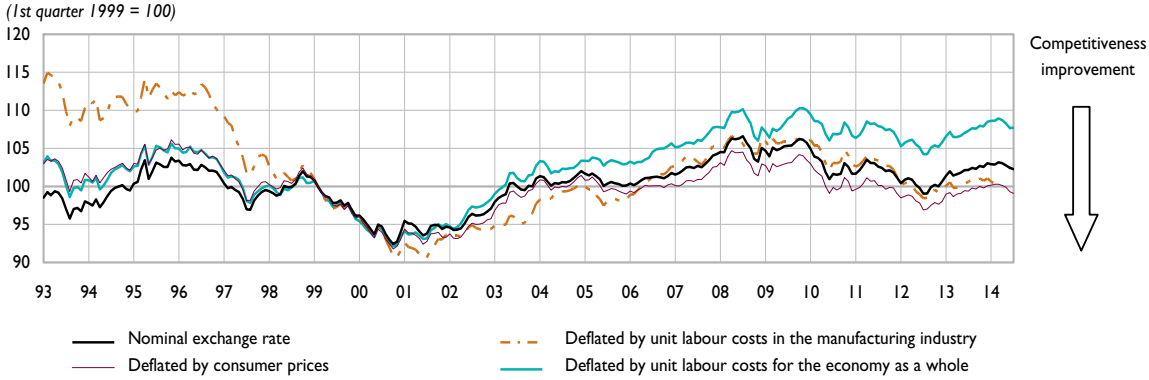
Indicators deflated by consumer prices

(1st quarter 1999 = 100)



Indicators of competitiveness compared to 24 OECD countries

(1st quarter 1999 = 100)



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

Calculations: Banque de France. *Produced 20 August 2014*

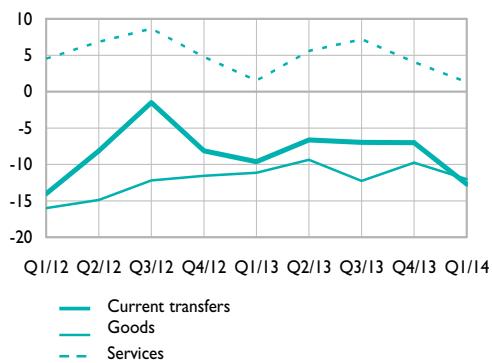
Table 5
Balance of payments – Main components (quarterly data) – France

(unadjusted data, EUR billions)

	2012	2013	2013				2014
			Q1	Q2	Q3	Q4	Q1
Current account	**-31.8**	**-30.3**	**-9.6**	**-6.6**	**-7.0**	**-7.0**	**-12.7**
Goods	-54.6	-42.5	-11.1	-9.4	-12.3	-9.8	-12.0
Services	24.7	18.3	1.5	5.6	7.2	4.0	1.3
Primary income	40.7	39.3	14.7	8.5	8.8	7.3	14.5
Secondary income	-42.6	-45.3	-14.7	-11.4	-10.6	-8.6	-16.4
Capital account	**0.5**	**1.8**	**0.0**	**1.1**	**0.1**	**0.6**	**0.8**
Financial account	**-21.0**	**-14.2**	**8.8**	**-5.7**	**-4.3**	**-12.9**	**-1.9**
Direct investment	14.1	-5.1	2.9	-1.8	-4.2	-2.1	4.0
French direct investment abroad	*37.7*	*-0.2*	*2.3*	*-2.3*	*2.9*	*-3.2*	*9.4*
Foreign direct investment in France	*23.6*	*4.9*	*-0.6*	*-0.5*	*7.1*	*-1.1*	*5.5*
Portfolio investment	-26.5	-69.8	10.2	-23.7	-4.3	-52.0	-13.0
Assets	*-1.7*	*66.3*	*52.9*	*10.4*	*16.6*	*-13.7*	*40.4*
Liabilities	*24.9*	*136.1*	*42.8*	*34.1*	*20.9*	*38.3*	*53.4*
Financial derivatives	-14.3	-16.8	-4.4	-6.1	0.7	-7.0	-4.7
Other investment [a)]	1.7	79.0	0.6	26.2	1.6	50.7	10.2
Reserve assets	4.0	-1.5	-0.5	-0.3	1.9	-2.6	1.6
Net errors and omissions	**10.3**	**14.3**	**18.4**	**-0.2**	**2.5**	**-6.5**	**10.0**

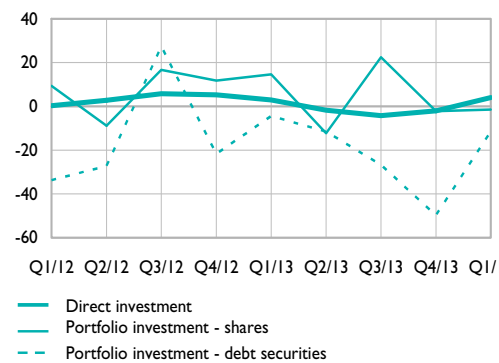
Current account balance

(unadjusted data, EUR billions)



Financial account balance

(unadjusted data, EUR billions)



The balance of payments has been compiled in accordance with the 6th Balance of Payments Manual.
a) Loans and deposits transactions.

Source: Banque de France

Produced 20 August 2014

Table 6
Balance of payments - Current account (main components) - France

(unadjusted data, EUR billions)

	2012	2013	2013				2014
			Q1	Q2	Q3	Q4	Q1
Current account	**-31.8**	**-30.3**	**-9.6**	**-6.6**	**-7.0**	**-7.0**	**-12.7**
Goods	**-54.6**	**-42.5**	**-11.1**	**-9.4**	**-12.3**	**-9.8**	**-12.0**
Exports	*435.9*	*437.3*	*109.7*	*111.8*	*104.2*	*111.6*	*108.1*
Imports	*490.6*	*479.9*	*120.8*	*121.2*	*116.5*	*121.4*	*120.1*
General merchandise	-72.4	-64.1	-17.0	-15.1	-16.7	-15.3	-16.7
Merchanting	17.8	21.6	5.9	5.7	4.5	5.6	4.6
Services	24.7	18.3	1.5	5.6	7.2	4.0	1.3
Exports	*184.0*	*192.0*	*41.5*	*48.9*	*52.9*	*48.6*	*43.0*
Imports	*159.2*	*173.7*	*40.0*	*43.3*	*45.8*	*44.6*	*41.7*
Manufacturing services on physical inputs owned by others	1.4	1.6	0.4	0.4	0.3	0.4	0.4
Maintenance and repair services	2.8	2.0	0.5	0.5	0.5	0.5	0.4
Transport	-0.3	-1.7	-0.6	-0.3	-0.5	-0.4	-0.5
Travel	10.7	10.4	0.7	3.8	5.3	0.5	0.5
Construction	1.1	0.7	0.1	-0.1	0.0	0.8	0.0
Insurance and pension services	1.0	0.1	0.0	-0.1	0.1	0.0	-0.3
Financial services	4.3	4.6	1.2	1.1	1.1	1.2	1.2
Charges for the use of intellectual property	3.1	1.1	0.0	0.3	0.2	0.5	-0.1
Telecommunications, computer and information services	0.5	-1.1	-0.3	-0.3	-0.4	-0.2	-0.3
Other business services	0.5	1.2	-0.4	0.3	0.6	0.6	0.1
Personal, cultural and recreational services	-0.7	-0.9	-0.2	-0.3	-0.2	-0.2	-0.2
Government services	0.4	0.4	0.1	0.1	0.1	0.1	0.2
Other services							
Primary income	**40.7**	**39.3**	**14.7**	**8.5**	**8.8**	**7.3**	**14.5**
Compensation of employees	15.7	15.9	4.0	4.0	4.0	4.0	4.0
Investment income	16.7	14.1	3.1	4.3	5.1	1.5	3.3
Direct investment	*39.1*	*34.2*	*5.0*	*16.2*	*7.3*	*5.7*	*4.9*
Portfolio investment	*-18.7*	*-17.2*	*-1.1*	*-11.2*	*-1.4*	*-3.5*	*-0.9*
Other investment [a)]	*-4.1*	*-3.3*	*-1.0*	*-0.8*	*-0.8*	*-0.7*	*-0.8*
Reserve assets	*0.4*	*0.5*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
Other primary income	*8.4*	*9.3*	*7.6*	*0.2*	*-0.3*	*1.8*	*7.2*
Secondary income	**-42.6**	**-45.3**	*-14.7*	*-11.4*	*-10.6*	*-8.6*	**-16.4**
General government	-28.6	-30.5	-11.1	-7.8	-6.8	-4.8	-12.3
Other sectors	-14.0	-14.8	-3.6	-3.6	-3.8	-3.8	-4.1
of which workers' remittances	*-8.2*	*-8.4*	*-2.1*	*-2.1*	*-2.1*	*-2.1*	*-2.1*
Capital account	0.5	1.8	0.0	1.1	0.1	0.6	0.8

The balance of payments has been compiled in accordance with the 6th Balance of Payments Manual.
a) Loans and deposits transactions.

Source: Banque de France *Produced 20 August 2014*

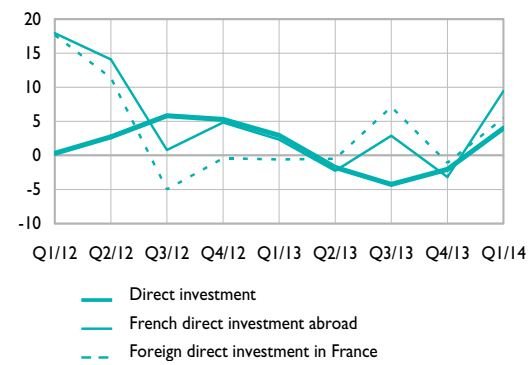
Table 7
Balance of payments - Financial flows (quarterly data) – France

(unadjusted data, EUR billions)

	2012	2013	2013				2014
			Q1	Q2	Q3	Q4	Q1
Financial account	**-21.0**	**-14.2**	**8.8**	**-5.7**	**-4.3**	**-12.9**	**-1.9**
Direct investment	14.1	-5.1	2.9	-1.8	-4.2	-2.1	4.0
French direct investment abroad	37.7	-0.2	2.3	-2.3	2.9	-3.2	9.4
of which Equity capital	*45.9*	*9.1*	*3.4*	*-0.2*	*2.6*	*3.3*	*6.2*
Foreign direct investment in France	23.6	4.9	-0.6	-0.5	7.1	-1.1	5.5
of which Equity capital	*12.3*	*17.5*	*4.9*	*4.1*	*4.5*	*4.0*	*3.5*
Portfolio investment	-26.5	-69.8	10.2	-23.7	-4.3	-52.0	-13.0
Assets	-1.7	66.3	52.9	10.4	16.6	-13.7	40.4
Equity and investment fund shares	*54.3*	*48.8*	*17.4*	*-4.5*	*20.4*	*15.6*	*-5.3*
Long-term debt securities (>1yr)	*-79.6*	*36.3*	*20.1*	*7.9*	*3.2*	*5.1*	*31.3*
Short-term debt securities (<1yr)	*23.7*	*-18.8*	*15.4*	*7.0*	*-7.0*	*-34.3*	*14.3*
Liabilities	24.9	136.1	42.8	34.1	20.9	38.3	53.4
Equity and investment fund shares	*25.4*	*26.1*	*2.7*	*7.7*	*-2.0*	*17.7*	*-3.8*
Long-term debt securities (>1yr)	*36.5*	*82.0*	*20.1*	*25.0*	*3.6*	*33.4*	*47.4*
Short-term debt securities (<1yr)	*-36.9*	*28.0*	*19.9*	*1.5*	*19.4*	*-12.8*	*9.8*
Financial derivatives	-14.3	-16.8	-4.4	-6.1	0.7	-7.0	-4.7
Other investment [a)]	1.7	79.0	0.6	26.2	1.6	50.7	10.2
Reserve assets	4.0	-1.5	-0.5	-0.3	1.9	-2.6	1.6
Net errors and omissions	**10.3**	**14.3**	**18.4**	**-0.2**	**2.5**	**-6.5**	**10.0**

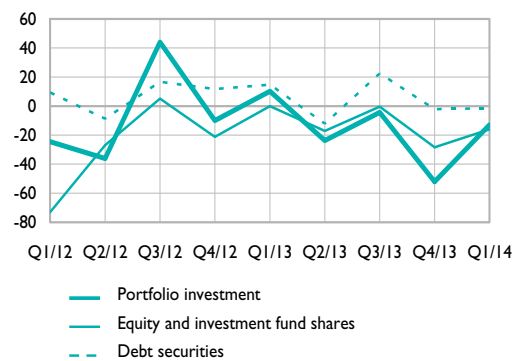
Direct investment account

(unadjusted data, EUR billions)



Portfolio investment account

(unadjusted data, EUR billions)



The balance of payments has been compiledin accordance with the 6th Balance of Payments Manual.
a) Loans and deposits transactions.

Source: Banque de France *Produced 20 August 2014*

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

(unadjusted data, EUR billions)

	1st quarter 2014					
	EMU [a)]	UE-28 excl. EMU [b)]	USA	Japan	Switzerland	China
Current account	**0.5**	**-1.0**	**0.5**	**-0.3**	**2.3**	**na**
Receipts	*115.0*	*5.9*	*13.2*	*2.3*	*9.1*	*4.5*
Expenditure	*114.5*	*6.9*	*12.8*	*2.6*	*6.7*	*na*
Goods	-4.8	-0.6	-1.5	-0.3	-0.6	-5.9
Receipts	*65.7*	*4.8*	*6.1*	*1.6*	*2.4*	*3.5*
Expenditure	*70.4*	*5.3*	*7.5*	*1.9*	*3.1*	*9.4*
Services	-1.1	-0.7	-0.1	0.0	1.4	0.0
Receipts	*23.6*	*0.7*	*4.6*	*0.6*	*3.5*	*0.8*
Expenditure	*24.8*	*1.4*	*4.7*	*0.5*	*2.1*	*0.8*
Primary income	19.8	0.4	2.3	0.2	2.4	na
Receipts	*26.1*	*0.4*	*2.6*	*0.3*	*2.8*	*0.2*
Expenditure [c)]	*6.4*	*0.0*	*0.3*	*0.1*	*0.5*	*na*
Secondary income	*-11.5*	*-0.1*	*0.0*	*-0.1*	*-0.7*	*-0.1*
Receipts	*1.5*	*0.0*	*0.3*	*0.0*	*0.4*	*0.0*
Expenditure	*12.9*	*0.1*	*0.3*	*0.1*	*1.1*	*0.1*
Financial account						
Direct investment	-1.3	0.1	3.5	-0.4	-3.0	0.3
French direct investment abroad	*5.4*	*0.4*	*3.2*	*-0.1*	*-1.9*	*0.2*
Foreign direct investment in France	*6.7*	*0.3*	*-0.3*	*0.3*	*1.1*	*-0.1*
Portfolio investment – Assets [d)]	46.2	0.0	8.4	-5.2	0.1	-1.1
Equity and investment fund shares	*9.0*	*0.0*	*4.6*	*-10.3*	*-0.2*	*-1.0*
Long-term debt securities (>1yr)	*23.3*	*0.0*	*3.5*	*3.3*	*0.2*	*0.1*
Short-term debt securities (<1yr)	*13.8*	*0.0*	*0.4*	*1.8*	*0.1*	*-0.2*
Other investment [e)]	*13.3*	2.6	*-1.4*	5.4	-3.4	-0.7

The balance of payments has been compiled in accordance with the 6th Balance of Payments Manual.
a) 17 Member States.
b) Denmark, United Kingdom, Sweden, European institutions and new Member States (Czech Republic, Hungary, Latvia, Lithuania, Poland, Bulgaria, Romania, Croatia).
c) Geographical breakdown of portfolio income based on data compiled by the IMF (Coordinated Portfolio Investment Survey); data for China not available.
d) The geographical breakdown is not available for liabilities.
e) Loans and deposits transactions.

Source: Banque de France *Produced 20 August 2014*

Table 9
Balance of payments (monthly data) - France

(unadjusted data, EUR billions)

	2014			
	March	April	May	June
Current account	-2.4	-4.3	-9.7	-0.8
Goods	-2.9	-3.5	-3.6	-3.7
Services	1.1	1.9	1.5	2.7
Primary income	3.5	0.8	-4.0	7.7
Secondary income	-4.1	-3.6	-3.6	-7.4
Capital account	0.3	0.1	-0.2	0.1
Financial account	**38.6**	**-12.0**	**-24.1**	**19.1**
Direct investment	0.7	2.4	-5.6	-0.4
French direct investment abroad	*2.3*	*2.7*	*-4.6*	*1.2*
Equity capital	*0.3*	*1.9*	*-5.2*	*0.4*
Reinvested earnings	*1.0*	*1.0*	*1.0*	*1.0*
Other capital (inter-company loans)	*1.0*	*-0.2*	*-0.4*	*-0.2*
Foreign direct investment in France	*1.6*	*0.3*	*1.0*	*1.6*
Equity capital	*0.5*	*1.0*	*0.7*	*1.0*
Reinvested earnings	*0.4*	*0.4*	*0.4*	*0.4*
Other capital (inter-company loans)	*0.7*	*-1.1*	*-0.1*	*0.2*
Portfolio investment	-6.3	29.5	6.1	-7.0
Assets	*25.4*	*14.6*	*19.3*	*3.0*
Equity and investment fund shares	*7.6*	*4.9*	*7.8*	*7.7*
Long-term debt securities (>1yr)	*13.4*	*3.2*	*-4.0*	*-5.2*
Short-term debt securities (<1yr)	*4.4*	*6.6*	*15.4*	*0.4*
Liabilities	*31.7*	*-14.9*	*13.2*	*10.0*
Equity and investment fund shares	*1.1*	*-5.6*	*0.1*	*16.3*
Long-term debt securities (>1yr)	*19.7*	*-1.9*	*15.8*	*-14.7*
Short-term debt securities (<1yr)	*10.9*	*-7.4*	*-2.7*	*8.4*
Financial derivatives	0.2	-1.9	-5.4	-2.4
Other investment [a)]	46.0	-42.4	-19.1	28.1
of which IMF excl. Banque de France (net flows)	19.1	-21.7	-6.1	18.7
Reserve assets	-2.0	0.5	0.0	0.8
Net errors and omissions	**40.7**	**-7.8**	**-14.2**	**19.8**

The balance of payments has been compiled in accordance with the 6th Balance of Payments Manual.
a) Loasn and deposits transactions.

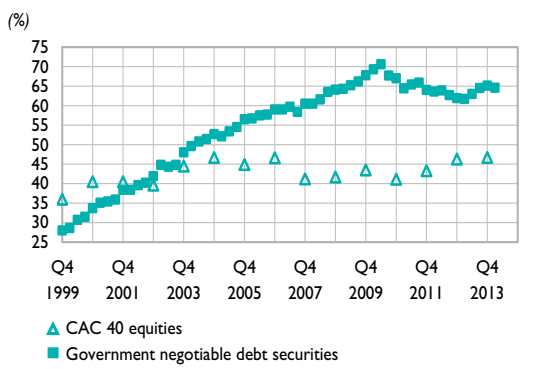
Source: Banque de France *Produced 20 August 2014*

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

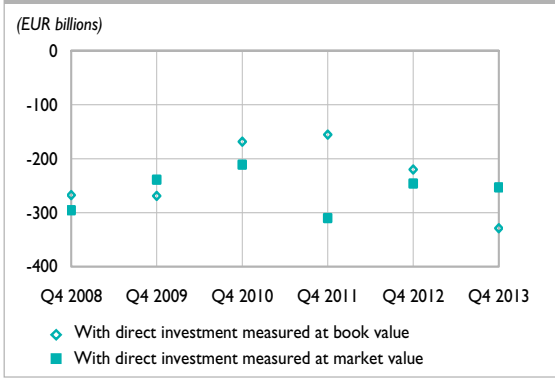
(EUR billions)

	2009	2010	2011	2012	2013	2014
	Dec.	Dec.	Dec.	Dec.	Dec.	Q1
Assets	**5,427.2**	**5,731.9**	**5,962.1**	**6,016.3**	**5,741.4**	**5,836.6**
French direct investment abroad	1,024.0	1,140.1	1,238.6	1,268.5	1,235.9	1,243.8
Equity capital and reinvested earnings	*736.3*	*839.1*	*874.5*	*914.6*	*897.3*	*902.1*
Other capital (inter-company loans)	*287.6*	*301.0*	*364.1*	*353.9*	*338.6*	*341.8*
Portfolio investment	2,070.8	2,100.1	1,865.6	1,991.0	2,094.7	2,161.7
Financial derivatives	926.6	825.8	1,092.2	1,080.2	804.7	776.5
Other investment [a)]	1,313.5	1,541.4	1,632.7	1,536.8	1,501.1	1,542.6
Reserve assets	92.4	124.5	133.1	139.9	105.1	112.0
Liabilities	**5,696.1**	**5,900.3**	**6,117.4**	**6,236.2**	**6,070.2**	**6,210.2**
Foreign direct investment in France	690.8	733.1	811.2	824.8	825.2	830.6
Equity capital and reinvested earnings	*408.4*	*434.5*	*443.1*	*442.3*	*460.0*	*463.4*
Other capital (inter-company loans)	*282.5*	*298.6*	*368.1*	*382.5*	*365.2*	*316.3*
Portfolio investment	2,290.0	2,420.9	2,412.2	2,612.1	2,819.3	2,922.5
Financial derivatives	998.3	873.6	1,136.6	1,125.4	869.8	839.3
Other investment [a)]	1,717.0	1,872.8	1,757.4	1,673.9	1,555.9	1,617.9
Net position	**-268.8**	**-168.4**	**-155.3**	**-219.9**	**-328.7**	**-373.6**

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



France's international investment position



The balance of payments has been compiled in accordance with the 6th Balance of Payments Manual.
a) Loans and deposits transactions.

Source: Banque de France *Produced 20 August 2014*

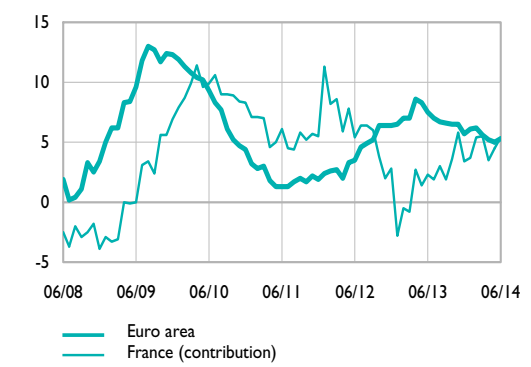
Table 11
Main monetary and financial aggregates – France and the euro area

(annual percentage growth rate)

	2011	2012	2013	2013	2013	2014					
	Dec.	Dec.	Dec.	June	Dec.	Jan.	Feb.	March	April	May	June
M1											
Euro area [a]	1.9	6.4	5.7	7.5	5.7	6.1	6.2	5.6	5.2	5.0	5.3
France (contribution)	5.5	2.8	3.4	2.3	3.4	3.7	5.4	5.5	3.5	4.5	5.4
M2											
Euro area [a]	1.9	4.5	2.5	4.3	2.5	2.4	2.4	2.2	2.0	2.1	2.3
France (contribution)	6.8	5.2	2.3	4.4	2.3	1.6	2.1	1.8	0.6	1.4	1.8
M3											
Euro area [a]	1.6	3.5	1.0	2.4	1.0	1.1	1.3	1.0	0.7	1.0	1.5
France (contribution)	3.0	2.6	1.3	2.5	1.3	1.4	1.8	0.9	-0.7	-0.1	0.7
Loans to the private sector											
Euro area [a]	1.0	-0.6	-2.3	-1.6	-2.3	-2.3	-2.2	-2.2	-1.8	-2.0	-1.7
France [b]	3.1	2.5	0.7	2.3	0.7	0.5	1.1	0.9	1.4	1.0	1.6

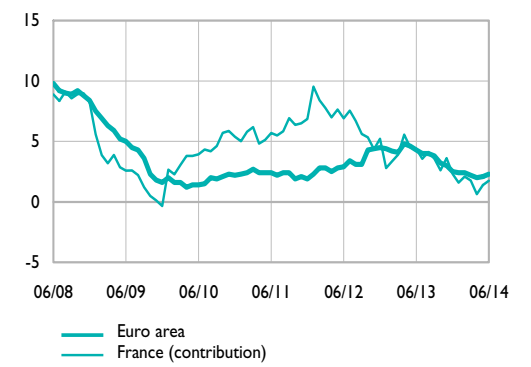
M1

(annual percentage growth rate)



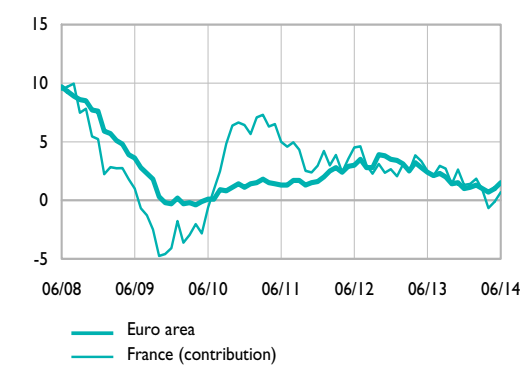
M2

(annual percentage growth rate)



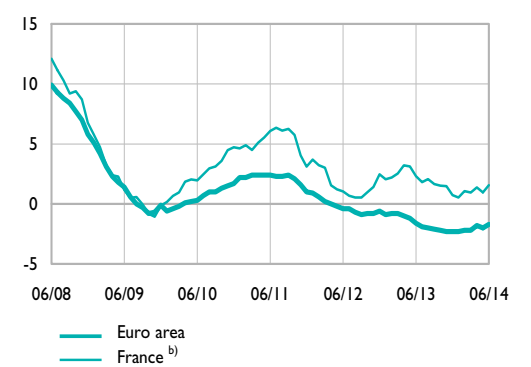
M3

(annual percentage growth rate)



Loans to the private sector

(annual percentage growth rate)



a) Seasonal and calendar effect adjusted data.
b) Loans extended by MFIs resident in France to euro area residents excluding MFIs and central government.

Sources: Banque de France, European Central Bank. *Produced 20 August 2014*

Table 12
Banque de France Monthly Statement [a)]

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

	2011	2012	2013	2013	2014			
	Dec.	Dec.	Dec.	June	March	April	May	June
Assets								
National territory	295.8	326.4	199.7	240.3	177.2	171.3	171.1	176.2
Loans	218.4	234.2	127.1	156.3	107.5	103.3	103.5	108.6
MFIs [b)]	*218.2*	*234.0*	*127.0*	*156.2*	*107.3*	*103.1*	*103.3*	*108.5*
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	76.9	92.1	72.5	83.8	69.6	67.9	67.5	67.4
MFIs	*34.1*	*32.2*	*25.2*	*25.4*	*26.1*	*26.9*	*27.1*	*27.1*
General government	*42.9*	*59.9*	*47.3*	*58.4*	*43.5*	*41.0*	*40.4*	*40.3*
Other sectors	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Shares and other equity	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other euro area countries [b)]	106.8	87.6	91.4	93.7	92.4	91.0	90.2	91.7
Rest of the world [b)]	110.5	114.9	88.3	100.3	86.9	92.0	92.7	92.9
Gold	95.3	98.8	68.2	72.0	73.5	72.8	71.9	75.3
Not broken down by geographical area [c)]	105.3	109.6	107.6	107.3	102.5	102.2	100.9	103.6
Total	**713.6**	**737.3**	**555.2**	**613.5**	**532.6**	**529.4**	**526.8**	**539.6**
Liabilities								
National territory – Deposits	185.6	200.3	116.0	127.0	105.3	84.6	76.6	81.0
MFIs	176.2	194.8	112.2	123.7	104.1	83.4	75.1	76.1
General government	8.9	4.9	3.3	2.6	0.4	0.5	0.6	4.0
Other sectors	0.5	0.6	0.6	0.7	0.7	0.8	1.0	0.9
Other euro area countries – Deposits	79.6	73.9	34.1	66.5	29.7	42.0	49.2	48.2
Rest of the world – Deposits	143.4	146.0	112.6	133.3	104.6	107.7	107.3	110.1
Not broken down by geographical area	305.0	317.1	292.5	286.8	293.0	295.0	293.7	300.3
Banknotes and coins in circulation [d)]	169.0	173.5	181.7	173.1	178.0	179.9	180.8	181.9
of which coins [e)]	*2.8*	*2.9*	*3.0*	*2.9*	*2.9*	*3.0*	*3.0*	*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	112.4	117.0	86.6	91.8	93.2	92.5	91.7	97.5
Other liabilities	23.6	26.5	24.1	21.9	21.8	22.6	21.2	21.0
Total [f)]	**713.6**	**737.3**	**555.2**	**613.5**	**532.6**	**529.4**	**526.8**	**539.6**

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 2013 published in March 2014 (550 bn) can be calculated by substracting from the total of the Monthly Statement at end December 2013 (552.2 bn): coins (3 bn) and miscellaneous amounts linked to the accounting gap between the statement established in the early January 2014 and the Annual Accounts, which include all the year-end entries (2.2 bn).

Source: Banque de France. *Produced 20 August 2014*

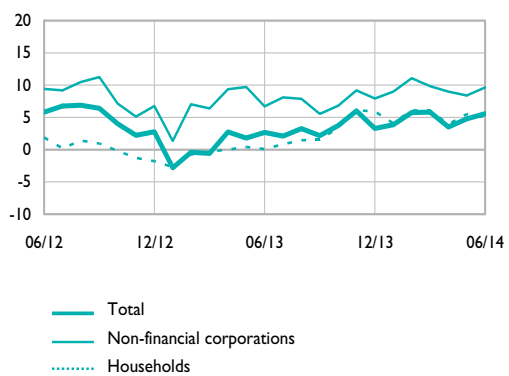
Table 13
Deposits – France

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

	2011	2012	2013	2013	2014			
	Dec.	Dec.	Dec.	June	March	April	May	June
Overnight deposits								
Total non-financial sectors (excluding central government)	546.3	555.9	582.3	553.7	563.7	567.6	568.5	584.9
Households and similar	*284.4*	*279.2*	*295.5*	*288.9*	*294.4*	*297.2*	*295.3*	*303.6*
Non-financial corporations	*203.3*	*214.7*	*231.2*	*210.0*	*218.9*	*219.9*	*221.8*	*230.0*
General government (excl. central government)	*58.6*	*62.0*	*55.7*	*54.7*	*50.5*	*50.6*	*51.4*	*51.3*
Other sectors	39.3	42.5	35.7	41.0	39.4	39.9	42.3	43.3
Total – Outstanding amounts	**585.1**	**598.0**	**617.7**	**594.3**	**602.7**	**607.1**	**610.3**	**627.4**
Total – Growth rate	**5.3**	**2.8**	**3.3**	**2.7**	**5.8**	**3.5**	**4.8**	**5.6**
Passbook savings accounts								
"A" and "Blue" passbooks	214.7	247.2	263.2	262.4	265.4	265.8	265.7	265.5
Housing savings accounts	36.1	35.2	33.4	34.5	32.7	32.5	32.2	32.0
Sustainable development passbook accounts	69.4	92.0	100.7	98.8	101.9	102.2	102.2	102.3
People's savings passbooks	52.4	51.7	48.3	49.7	46.5	46.4	46.3	46.2
Youth passbooks	7.0	7.0	6.9	6.8	6.7	6.7	6.7	6.7
Taxable passbooks	179.7	178.7	172.5	178.1	178.3	179.4	177.8	175.4
Total – Outstanding amounts	**559.3**	**611.7**	**625.1**	**630.2**	**631.4**	**632.9**	**631.0**	**628.2**
Total – Growth rate	**7.3**	**9.4**	**2.2**	**8.2**	**0.8**	**-0.1**	**-0.2**	**-0.3**

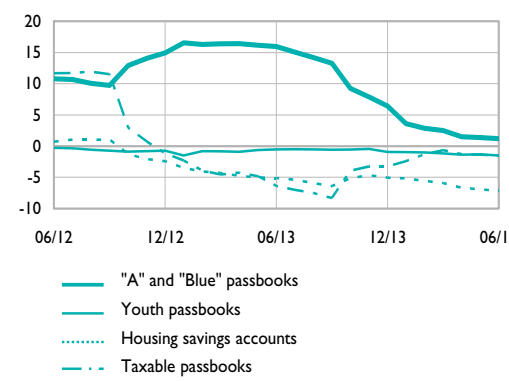
Overnight deposits

(annual growth rate)



Passbook savings accounts

(annual growth rate)



Source: Banque de France.

Produced 20 August 2014

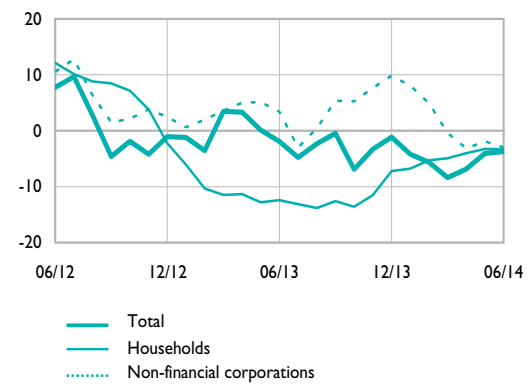
Table 14
Time deposits – France

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

	2011	2012	2013	2013	2014			
	Dec.	Dec.	Dec.	June	March	April	May	June
Deposits with agreed maturity up to two years								
Total non-financial sectors (excl. central government)	108.1	111.8	117.3	111.4	112.1	110.8	109.3	108.1
Households and similar	*31.7*	*30.9*	*28.6*	*29.2*	*28.5*	*28.5*	*28.3*	*28.2*
Non-financial corporations	*75.5*	*79.9*	*87.7*	*81.2*	*82.5*	*81.0*	*79.8*	*78.7*
General government (excl. central government)	*1.0*	*0.9*	*1.0*	*0.9*	*1.1*	*1.2*	*1.2*	*1.2*
Other sectors	42.7	40.7	33.5	34.3	30.7	33.4	34.4	32.2
Total – Outstanding amounts	**150.9**	**152.5**	**150.7**	**145.7**	**142.8**	**144.1**	**143.7**	**140.3**
Total – Growth rate	**10.9**	**-1.1**	**-1.1**	**-1.9**	**-8.4**	**-6.8**	**-4.1**	**-3.7**
Deposits with agreed maturity of over two years								
Total non-financial sectors (excl. central government)	306.7	328.9	342.2	332.3	347.3	348.7	348.7	349.4
Households and similar	*259.0*	*269.4*	*274.8*	*267.4*	*276.9*	*277.4*	*277.6*	*278.1*
PEL	*186.6*	*188.2*	*197.7*	*189.3*	*201.2*	*202.0*	*202.4*	*202.9*
PEP	*24.4*	*24.0*	*23.0*	*23.2*	*22.6*	*22.5*	*22.4*	*22.3*
Other	*48.0*	*57.1*	*54.1*	*54.8*	*53.1*	*52.9*	*52.8*	*53.0*
Non-financial corporations	*46.6*	*58.1*	*65.5*	*63.3*	*68.2*	*69.3*	*69.0*	*69.2*
General government (excl. central government)	*1.1*	*1.4*	*1.9*	*1.7*	*2.1*	*2.1*	*2.1*	*2.1*
Other sectors	177.0	154.7	157.0	171.0	150.7	111.7	104.5	97.2
Total – Outstanding amounts	**483.7**	**483.5**	**499.3**	**503.3**	**497.9**	**460.4**	**453.2**	**446.6**
Total – Growth rate	**18.8**	**0.3**	**3.4**	**1.5**	**0.8**	**-7.2**	**-9.0**	**-11.2**

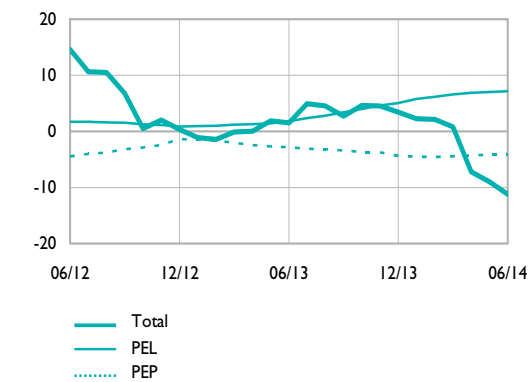
Deposits up to 2 years

(annual percentage growth rate)



Deposits over 2 years

(annual percentage growth rate)



Sources: Banque de France, European Central Bank.

Produced 20 August 2014

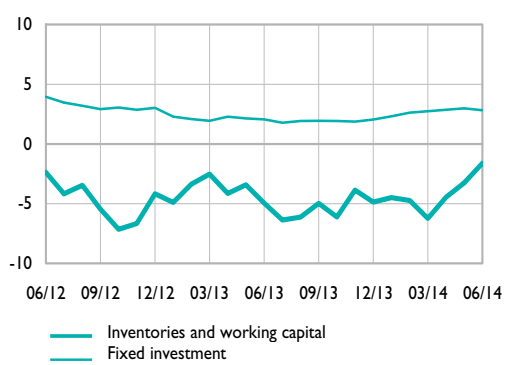
Table 15
Loans extended by credit institutions established in France to French residents – France

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

	2011	2012	2013	2013	2014				
	Dec.	Dec.	Dec.	June	Feb.	March	April	May	June
Loans to resident clients									
Private sector	2,053.7	2,100.0	2,114.9	2,123.4	2,131.8	2,136.7	2,153.1	2,150.9	2,153.2
General government	195.1	206.8	213.1	207.6	212.2	211.2	211.5	211.7	211.1
Total – Outstanding amounts	**2,248.7**	**2,306.7**	**2,328.1**	**2,331.0**	**2,344.0**	**2,347.9**	**2,364.7**	**2,362.7**	**2,364.3**
Private sector	3.1	2.5	0.7	2.3	1.1	0.9	1.4	1.0	1.6
General government	-6.7	6.1	2.8	5.2	2.4	2.1	1.4	1.5	1.7
Total – Growth rate	**2.2**	**2.8**	**0.9**	**2.6**	**1.2**	**1.0**	**1.4**	**1.0**	**1.6**
Loans to non-financial companies									
Fixed investment	547.1	563.0	568.0	562.1	570.8	570.5	569.3	570.6	570.3
Inventories and working capital	187.5	174.1	167.5	172.8	167.4	167.3	172.1	172.6	175.5
Other lending	81.2	82.0	81.3	83.1	79.0	79.3	77.8	78.6	80.2
Total – Outstanding amounts	**815.9**	**819.1**	**816.7**	**818.0**	**817.2**	**817.1**	**819.3**	**821.7**	**826.1**
Total – Growth rate	**4.4**	**1.0**	**0.2**	**0.4**	**0.5**	**0.0**	**0.4**	**0.9**	**1.2**
Loans to households									
Loans for house purchase	847.0	874.2	907.0	888.5	909.9	910.6	911.8	913.4	917.5
Consumer loans	161.1	160.4	157.3	157.1	156.6	156.4	157.6	157.7	157.1
Other lending	92.8	92.1	92.3	92.7	92.8	92.9	93.1	93.2	93.6
Total – Outstanding amounts	**1,100.9**	**1,126.7**	**1,156.6**	**1,138.3**	**1,159.3**	**1,159.8**	**1,162.6**	**1,164.2**	**1,168.2**
Total – Growth rate	**5.6**	**2.3**	**2.5**	**2.0**	**2.9**	**2.6**	**2.6**	**2.6**	**2.8**

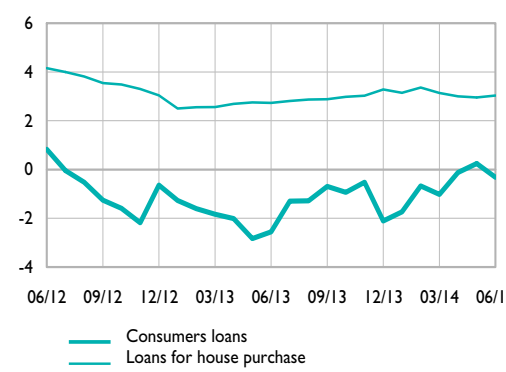
Loans to non-financial companies – France

(annual percentage growth rate)



Loans to households – France

(annual percentage growth rate)



Source: Banque de France.

Produced 20 August 2014

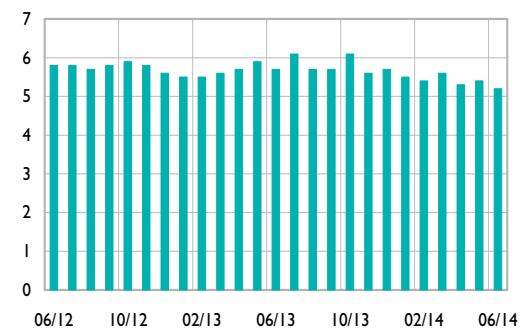
Table 16
New loans to residents, (excl. overdrafts) – France

(monthly flows - seasonally adjusted - in euro billions)

	2013			2014		
	April	May	June	April	May	June
Loans to non-financial corporations						
Loans ≤ 1 million euro [a)]	5.7	5.9	5.7	5.3	5.4	5.2
Loans > 1 million euro [a)]	11.7	11.4	12.2	10.4	10.3	9.9
Loans to households						
Cash loans to sole traders and individuals (excl. revolving consumer credit)	4.0	4.0	4.1	4.0	3.9	3.8
Housing loans	12.8	13.1	13.1	9.9	9.4	9.6

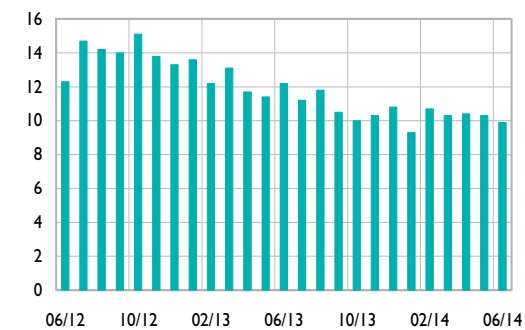
Non-financial corporations – Loans ≤ 1 million euro

(monthly flows - seasonally adjusted - in euro billions)



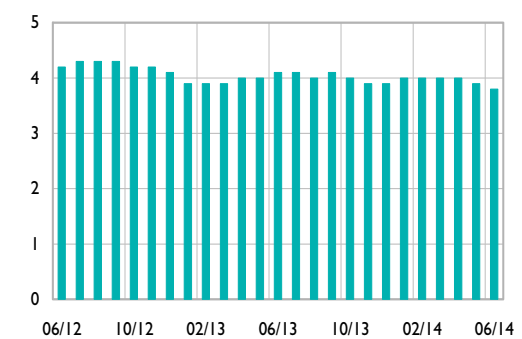
Non-financial corporations – Loans > 1 million euro

(monthly flows - seasonally adjusted - in euro billions)



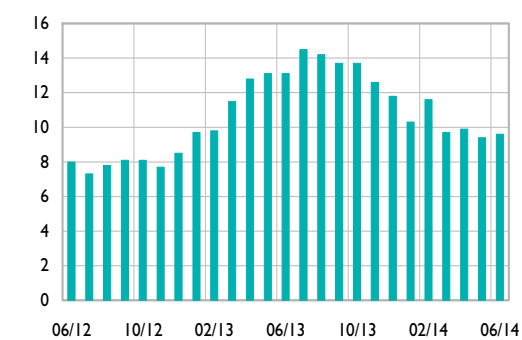
Households - Cash loans

(monthly flows - seasonally adjusted - in euro billions)



Households - Housing loans

(monthly flows - seasonally adjusted - in euro billions)



a) All initial rate fixation periods.

Sources: Banque de France, European Central Bank.

Produced 20 August 2014

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
	2013				2014	2014
	Q1	Q2	Q3	Q4	Q1	March
Financial assets						
Currency and deposits	-7.8	-7.7	-15.0	-23.6	-22.5	794.3
of which deposits included in M3 [a)]	*11.0*	*7.6*	*2.7*	*-14.0*	*-6.9*	*209.7*
Short-term debt securities	-0.5	-13.4	-22.3	-13.6	-11.1	58.2
Long-term debt securities	105.5	119.2	123.4	156.5	140.5	3,235.5
Loans	11.4	10.3	1.2	3.8	14.2	504.5
Shares and other equity	106.4	103.1	138.8	113.6	119.5	3,015.2
of which quoted shares	*0.1*	*-0.5*	*9.4*	*0.9*	*4.3*	*444.5*
Remaining net assets	-28.2	-31.0	-35.4	-3.6	6.2	238.2
Financing						
Debt securities	5.4	3.3	2.8	-0.2	0.1	55.4
Loans	0.1	-7.4	-23.2	-4.6	-4.8	298.3
Shares and other equity	2.1	2.2	1.3	4.7	4.8	535.6
Insurance technical reserves	170.6	176.2	184.3	195.2	215.9	6,909.1
Life insurance	*155.9*	*164.5*	*171.0*	*179.6*	*192.4*	*6,041.6*
Non-life insurance	*14.7*	*11.6*	*13.3*	*15.6*	*23.5*	*867.5*
Net lending/net borrowing (B9B)	**8.6**	**6.2**	**25.4**	**38.1**	**30.8**	

(EUR billions)

France	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2013				2014	2014
	Q1	Q2	Q3	Q4	Q1	March
Financial assets						
Currency and deposits	2.1	5.2	7.1	3.3	1.3	35.3
Short-term debt securities	-4.1	-13.0	-17.5	-8.1	-9.1	17.6
Long-term debt securities	44.1	59.1	73.5	69.6	53.2	1,331.3
Loans	0.9	1.1	1.1	0.6	0.5	35.7
Shares and other equity	11.7	2.8	-5.4	-5.7	8.2	716.1
of which quoted shares	*-2.7*	*-3.3*	*-4.4*	*-3.7*	*-3.5*	*77.6*
Remaining net assets	-14.6	-13.0	-10.6	-9.5	-7.1	-5.4
Financing						
Debt securities	0.9	1.7	2.5	1.8	1.9	12.0
Loans	11.0	14.5	13.8	9.0	7.2	100.4
Shares and other equity	1.6	1.5	1.2	1.6	1.1	111.5
Insurance technical reserves	40.9	46.4	50.5	50.0	49.5	1,836.6
Life insurance and pension funds	*31.3*	*37.1*	*40.0*	*39.5*	*40.3*	*1,560.7*
Non-life insurance	*9.6*	*9.3*	*10.4*	*10.5*	*9.2*	*275.9*
Net lending/net borrowing (B9B)	**-3.1**	**-10.0**	**-7.0**	**-0.2**	**-0.5**	

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

Sources: Banque de France, European Central Bank. *Produced 20 August 2014*

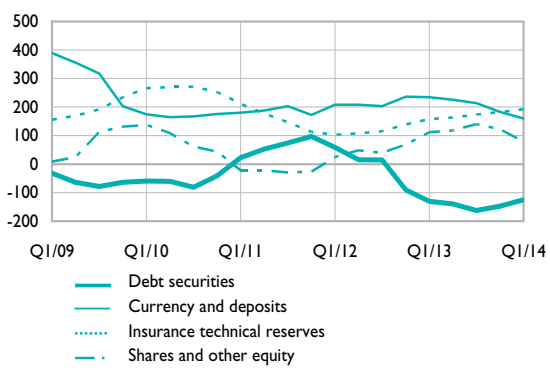
Table 18
Investment and financing – Households – Euro area

(EUR billions)

	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2013				2014	2014
	Q1	Q2	Q3	Q4	Q1	March
Financial assets						
Currency and deposits	234.3	225.8	214.2	182.9	159.8	7,254.5
of which deposits included in M3 [a]	*213.5*	*206.3*	*171.0*	*102.9*	*74.1*	*5,440.5*
Short-term debt securities	-15.6	-20.6	-27.7	-20.5	-14.8	33.1
Long-term debt securities	-115.1	-118.7	-134.9	-126.4	-110.3	1,222.3
Shares and other equity	111.8	118.1	139.9	121.7	79.0	5,273.5
Quoted shares	9.9	0.4	-9.7	-14.6	-13.6	957.2
Unquoted shares and other equity	57.5	57.1	85.2	76.7	49.2	2,775.3
Mutual fund shares	44.4	60.6	64.3	59.6	43.4	1,541.0
of which money market fund shares	*-39.4*	*-30.4*	*-27.2*	*-14.5*	*-20.9*	*90.7*
Insurance technical reserves	157.6	163.3	173.8	182.6	192.3	6,647.9
Remaining net assets	-50.0	-65.8	-63.5	-57.2	-25.2	-156.1
Financing						
Loans	-1.0	-12.0	-2.4	-19.3	-8.4	6,147.8
of which from euro area MFIs	*21.1*	*1.4*	*7.6*	*-4.1*	*-5.0*	*5,267.5*
Revaluation of financial assets						
Shares and other equity	249.6	270.1	318.8	447.8	555.1	
Insurance technical reserves	166.6	132.5	85.0	72.3	94.5	
Other flows	22.5	65.5	50.6	21.9	75.0	
Change in net financial worth	**762.7**	**782.3**	**758.7**	**844.5**	**1,013.8**	

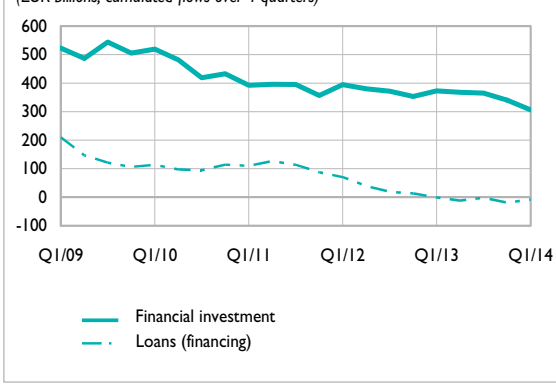
Investment flows

(EUR billions, cumulated flows over 4 quarters)



Investment and financing flows

(EUR billions, cumulated flows over 4 quarters)



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

Source: European Central Bank.

Produced 20 August 2014

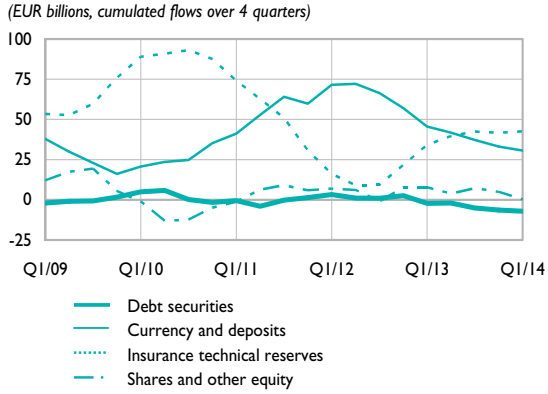
Table 19
Investment and financing – Households – France

(EUR billions)

	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2013				2014	2014
	Q1	Q2	Q3	Q4	Q1	March
Financial assets						
Currency and deposits	45.5	41.8	37.1	33.2	30.6	1,311.5
Short-term debt securities	-0.5	-0.5	-0.5	-0.6	-0.3	18.5
Long-term debt securities	-1.8	-1.6	-4.6	-5.9	-6.9	67.9
Shares and other equity	7.7	3.7	7.2	4.9	0.2	1,118.2
Quoted shares	-4.2	-6.1	-4.8	-5.7	-5.0	179.6
Unquoted shares and other equity	23.2	20.4	23.9	25.0	20.1	636.0
Mutual fund shares	-11.3	-10.7	-11.9	-14.4	-14.9	302.6
of which money market fund shares	*-8.0*	*-7.9*	*-6.1*	*-5.6*	*-6.2*	*18.8*
Insurance technical reserves	34.2	39.6	42.4	41.7	42.6	1,662.1
Remaining net assets	15.9	31.7	20.0	22.7	-6.5	29.6
Financing						
Loans	21.0	22.2	26.7	26.8	28.5	1,183.3
Revaluation of financial assets						
Shares and other equity	58.4	75.9	102.0	92.4	102.1	
Insurance technical reserves	16.4	23.4	26.5	22.4	27.1	
Other flows	7.1	5.4	-0.3	-1.5	29.0	
Change in net financial worth	**162.0**	**197.1**	**203.1**	**182.6**	**189.3**	

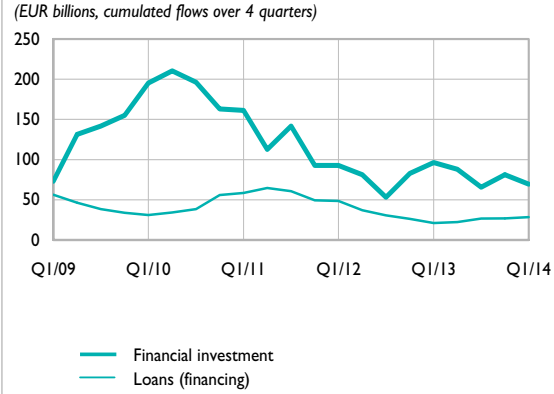
Investment flows

(EUR billions, cumulated flows over 4 quarters)



Investment and financing flows

(EUR billions, cumulated flows over 4 quarters)



Source: Banque de France.

Produced 20 August 2014

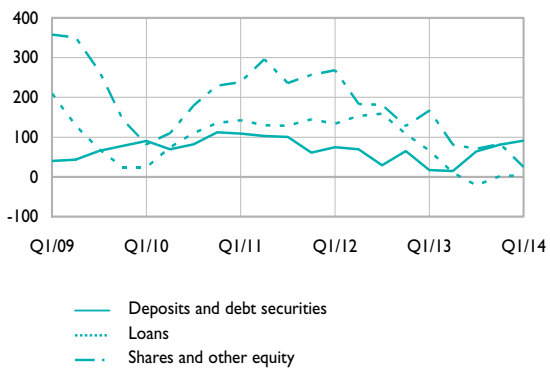
Table 20
Investment and financing – Non-financial corporations – Euro area

(EUR billions)

	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2013				2014	2014
	Q1	Q2	Q3	Q4	Q1	March
Financial assets						
Currency and deposits	46.1	50.0	97.5	124.0	102.5	2,116.8
of which deposits included in M3 [a)]	*75.9*	*76.1*	*86.7*	*102.0*	*91.6*	*1,729.1*
Debt securities	-29.1	-35.5	-33.2	-42.9	-11.2	330.2
Loans	65.9	10.5	-21.4	2.0	4.3	3,125.0
Shares and other equity	166.8	81.0	70.9	82.8	24.4	9,152.3
Insurance technical reserves	4.5	4.1	4.3	2.8	3.2	177.8
Remaining net assets	5.5	80.6	45.9	76.3	114.4	321.1
Financing						
Debt	119.9	35.6	-43.0	-0.8	-5.1	10,039.5
Loans	13.7	-57.6	-132.6	-87.3	-91.9	8,565.3
of which from euro area MFIs	*-115.1*	*-157.4*	*-165.7*	*-133.6*	*-137.3*	*4,336.6*
Debt securities	102.2	89.5	86.2	83.1	82.8	1,120.3
Pension fund reserves	4.0	3.7	3.3	3.4	4.0	353.9
Shares and other equity	165.5	160.4	193.4	215.6	196.7	15,495.6
Quoted shares	*10.8*	*20.9*	*22.8*	*30.6*	*56.6*	*4,672.8*
Unquoted shares and other equity	*154.7*	*139.5*	*170.5*	*185.0*	*140.2*	*10,822.7*
Net lending/net borrowing (B9B)	**-25.8**	**-5.4**	**13.6**	**30.1**	**46.0**	

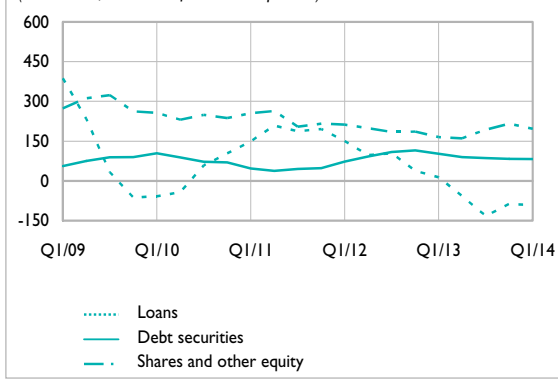
Investment flows

(EUR billions, cumulated flows over 4 quarters)



Financing flows

(EUR billions, cumulated flows over 4 quarters)



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

Source: European Central Bank.

Produced 20 August 2014

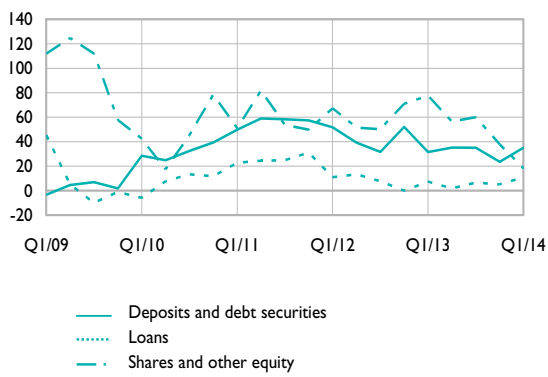
Table 21
Investment and financing – Non-financial corporations – France

(EUR billions)

	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2013				2014	2014
	Q1	Q2	Q3	Q4	Q1	March
Financial assets						
Currency and deposits	49.1	49.1	45.7	43.5	36.9	480.8
Debt securities	-17.4	-13.8	-10.7	-20.0	-1.8	63.7
Loans	7.2	1.8	6.4	5.0	10.8	698.6
Shares and other equity	77.5	56.4	59.9	37.8	18.1	3,271.9
Insurance technical reserves	0.8	0.4	0.4	0.1	0.2	50.0
Remaining net assets	-23.2	-19.8	-33.8	-11.7	46.3	28.8
Financing						
Debt	41.0	4.1	14.0	26.9	47.1	2,122.3
Loans	0.0	-19.2	-14.3	5.5	13.8	1,594.3
Debt securities	41.0	23.2	28.3	21.4	33.3	528.0
Shares and other equity	72.9	73.1	75.0	77.2	76.6	5,118.1
Quoted shares	*9.4*	*11.6*	*11.7*	*9.7*	*12.6*	*1,390.6*
Unquoted shares and other equity	*63.5*	*61.5*	*63.3*	*67.5*	*63.9*	*3,727.6*
Net lending/net borrowing (B9B)	**-19.8**	**-3.2**	**-21.0**	**-49.3**	**-13.1**	

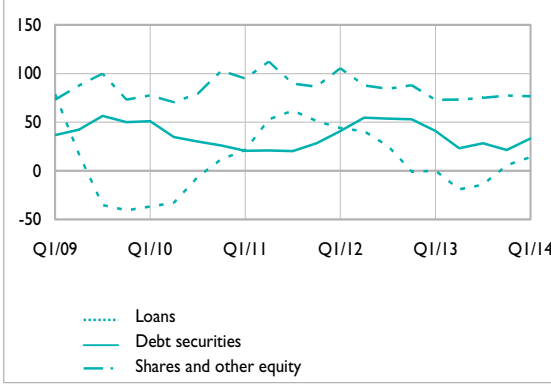
Investment flows

(EUR billions, cumulated flows over 4 quarters)



Financing flows

(EUR billions, cumulated flows over 4 quarters)



Source: Banque de France.

Produced 20 August 2014

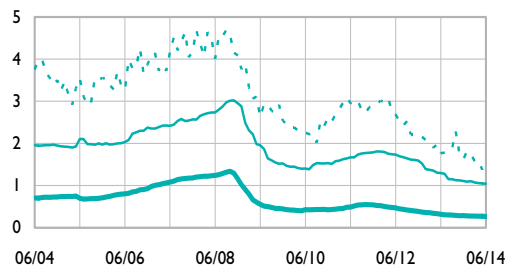
Table 22
Interest rates on bank deposits – France and the euro area

(average monthly rates – %)

	2012	2013	2013	2014				
	Dec.	Dec.	June	Feb.	March	April	May	June
Euro area								
Overnight deposits – households	0.39	0.29	0.32	0.28	0.28	0.27	0.27	0.27
Deposits redeemable at notice up to 3 months – households	1.59	1.11	1.30	1.11	1.07	1.06	1.05	1.04
Time deposits with agreed maturity over 2 years – non-financial corporations	2.16	1.63	1.77	1.75	1.58	1.60	1.38	1.52
France								
"A" passbooks (end of period)	2.25	1.25	1.75	1.25	1.25	1.25	1.25	1.25
Regulated savings deposits	2.26	1.29	1.78	1.29	1.28	1.28	1.28	1.28
Deposits with agreed maturity up to 2 years	2.26	1.97	2.13	1.99	1.94	1.93	1.95	1.91
Deposits with agreed maturity over 2 years	3.01	2.91	2.99	3.02	2.90	2.92	2.87	2.89

Euro area

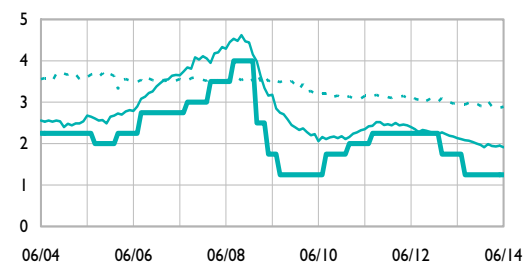
(average monthly rates – %)



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
Deposits with agreed maturity up to 2 years
Deposits with agreed maturity over 2 years

Sources: Banque de France, European Central Bank.

Produced 20 August 2014

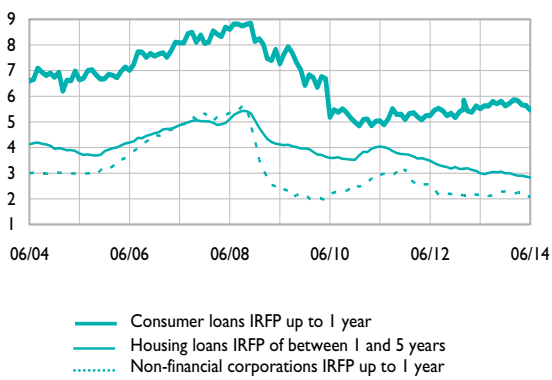
Table 23
Interest rates on bank loans – France and the euro area

(average monthly rate – %)

	2013						2014					
	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)]	5.63	5.62	5.80	5.71	5.81	5.63	5.73	5.87	5.83	5.67	5.64	5.46
Loans for house purchase												
Floating rate and IRFP of between 1 and 5 years [a)]	2.97	3.01	3.05	3.04	3.06	3.00	3.01	2.95	2.90	2.91	2.87	2.83
Non financial corporations of over EUR 1 million												
IRFP of up to 1 year [a)]	2.22	2.10	2.15	2.25	2.28	2.29	2.25	2.18	2.26	2.25	2.11	2.08
France												
Consumer loans	**5.75**	**5.76**	**5.76**	**5.73**	**5.82**	**5.83**	**5.90**	**5.85**	**5.78**	**5.62**	**5.58**	**5.43**
Loans for house purchase												
IRFP of up to 1 year [a)]	2.64	2.65	2.74	2.67	2.74	2.71	2.81	2.81	2.70	2.76	2.67	2.68
IRFP of over 1 year [a)]	3.13	3.13	3.14	3.14	3.21	3.21	3.23	3.22	3.21	3.17	3.12	3.05
Non-financial corporations												
IRFP of up to 1 year [a)]	1.89	1.77	1.76	1.88	1.87	1.95	1.92	1.87	1.96	1.87	1.80	1.92
IRFP of over 1 year [a)]	2.94	3.05	3.06	3.05	3.13	3.07	3.09	3.07	3.06	3.08	3.00	3.04

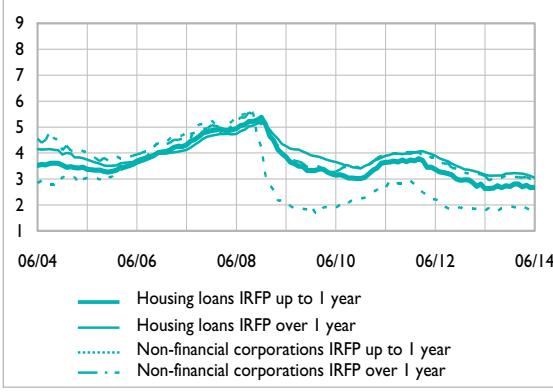
Euro area

(percentage points)



France

(percentage points)



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.

Sources: Banque de France, European Central Bank.

Produced 20 August 2014

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	2013	2014		
	Oct.	Jan.	April	July
Loans to households under Articles L312-1 to L312-36 of the french Consumer Code (housing loans)				
Fixed-rate loans	5.03	5.04	5.19	5.11
Floating-rate loans	4.45	4.51	4.64	4.71
Bridge loans	5.29	5.23	5.39	5.27
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	20.23	20.23	20.27	20.35
Loans comprised between EUR 3,000 and EUR 6,000	15.17	15.12	15.09	14.81
Loans over EUR 6,000	10.52	10.35	10.21	9.79

	2013			2014	
	April	July	Oct.	Jan.	April
Loans to enterprises					
Discount					
up to EUR 15,245	2.75	2.69	3.09	3.10	3.17
EUR 15,245 to EUR 45,735	2.98	3.23	3.91	3.63	4.30
EUR 45,735 to EUR 76,225	3.26	3.04	3.32	3.25	3.40
EUR 76,225 to EUR 304,898	2.27	2.15	2.52	2.40	2.81
EUR 304,898 to EUR 1,524,490	1.60	1.42	1.55	1.76	1.87
over EUR 1,524,490	0.90	0.85	1.10	1.00	1.23
Overdrafts					
up to EUR 15,245	9.84	9.92	9.94	9.98	9.80
EUR 15,245 to EUR 45,735	6.39	6.19	6.66	6.82	6.47
EUR 45,735 to EUR 76,225	4.50	4.55	5.11	5.52	5.48
EUR 76,225 to EUR 304,898	3.40	3.69	3.87	4.16	3.74
EUR 304,898 to EUR 1,524,490	1.95	1.83	2.13	2.41	2.13
over EUR 1,524,490	1.24	1.15	1.36	1.34	1.25
Other short-term loans					
up to EUR 15,245	3.57	3.43	3.63	3.47	3.35
EUR 15,245 to EUR 45,735	3.09	3.15	3.39	3.10	2.99
EUR 45,735 to EUR 76,225	2.57	2.61	2.73	2.64	2.49
EUR 76,225 to EUR 304,898	2.19	2.22	2.21	2.40	2.58
EUR 304,898 to EUR 1,524,490	1.61	1.74	1.72	1.70	1.80
over EUR 1,524,490	1.74	1.80	1.92	1.92	1.93
Medium and long-term loans					
up to EUR 15,245	3.23	3.20	3.22	3.20	3.06
EUR 15,245 to EUR 45,735	2.97	2.89	2.95	2.89	2.78
EUR 45,735 to EUR 76,225	2.93	2.88	2.89	2.92	2.84
EUR 76,225 to EUR 304,898	3.07	2.92	2.96	2.96	2.88
EUR 304,898 to EUR 1,524,490	2.86	2.78	2.83	2.90	2.89
over EUR 1,524,490	2.49	2.38	2.50	2.44	2.59

Source: Banque de France.

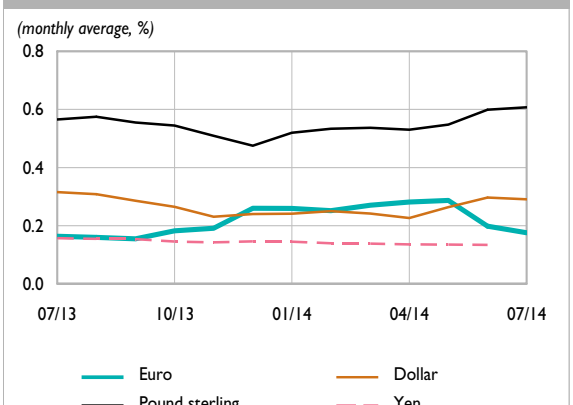
Produced 20 August 2014

Table 25
Interest rates

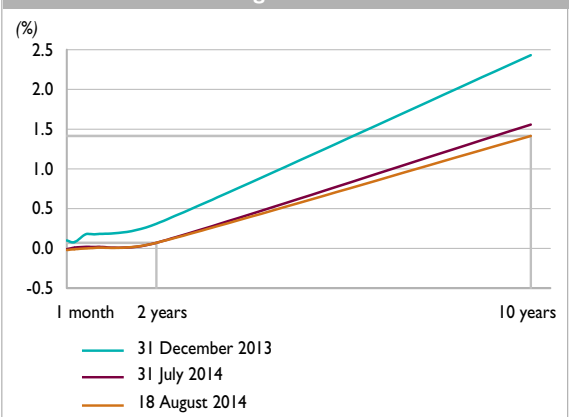
(%)

	Monthly average [a]										Key interest rates at 18/08/14
	2013			2014							
	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	
Short-term interbank interest rates											
Euro											**0.15**
Overnight	0.09	0.11	0.13	0.17	0.13	0.14	0.22	0.24	0.06	0.02	
3-month	0.18	0.19	0.26	0.26	0.25	0.27	0.28	0.29	0.20	0.18	
1-year	0.51	0.46	0.54	0.55	0.54	0.55	0.57	0.54	0.48	0.49	
Pound sterling											**0.50**
Overnight	0.45	0.44	0.44	0.45	0.45	0.44	0.44	0.44	0.44	0.45	
3-month	0.54	0.51	0.48	0.52	0.53	0.54	0.53	0.55	0.60	0.61	
1-year	0.86	0.86	0.85	0.86	0.91	0.89	0.92	1.02	1.13	1.16	
Dollar											**0.25**
Overnight	0.15	0.13	0.12	0.13	0.14	0.13	0.14	0.14	0.14	0.16	
3-month	0.26	0.23	0.24	0.24	0.25	0.24	0.23	0.26	0.30	0.29	
1-year	0.58	0.55	0.55	0.57	0.57	0.56	0.55	0.60	0.63	0.64	
Yen											**0.10**
Overnight	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.05	NA	
3-month	0.15	0.14	0.15	0.14	0.14	0.14	0.14	0.14	0.13	NA	
1-year	0.33	0.32	0.27	0.27	0.27	0.26	0.25	0.27	0.28	0.25	
10-year benchmark government bond yields [b]											
France	2.39	2.27	2.33	2.38	2.25	2.15	2.03	1.84	1.71	1.56	
Germany	1.81	1.72	1.85	1.78	1.66	1.60	1.53	1.40	1.35	1.20	
Euro area	3.16	3.17	3.31	3.21	3.09	2.89	2.61	2.55	2.28	2.16	
United Kingdom	2.69	2.75	2.93	2.86	2.75	2.73	2.68	2.63	2.70	2.64	
United States	2.62	2.73	2.89	2.85	2.70	2.72	2.70	2.55	2.59	2.54	
Japan	0.63	0.62	0.68	0.68	0.60	0.62	0.62	0.60	0.59	0.54	

3-month interbank market rates



Yield curve for French government bonds



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

Sources: Banque de France, European Central Bank.

Produced 20 August 2014

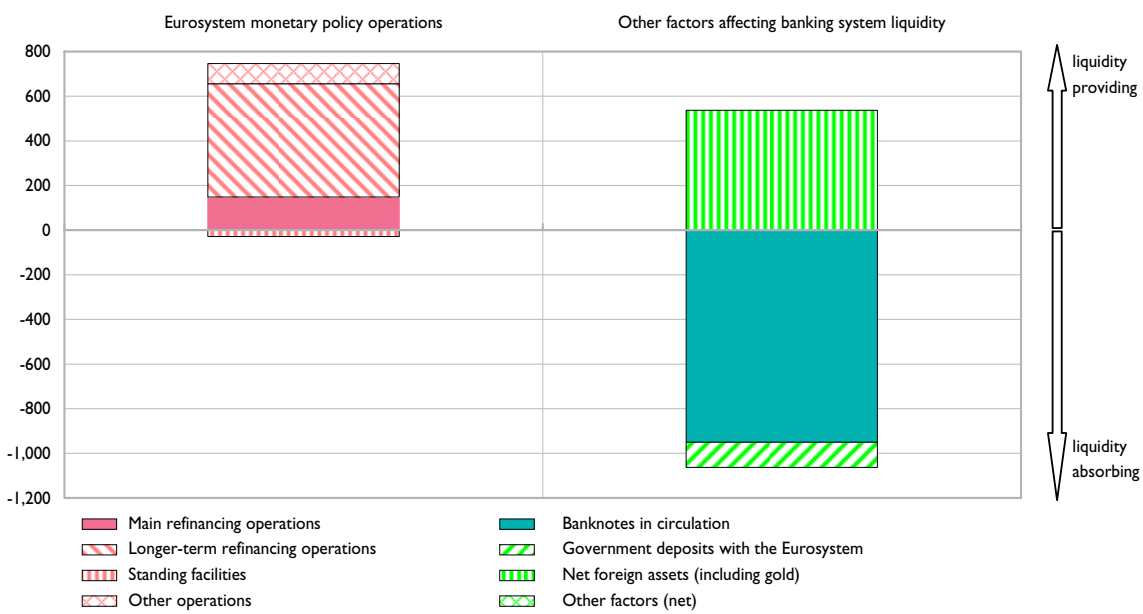
Table 26
Banking system liquidity and refinancing operations – Euro area

(EUR billions, daily average for the reserve maintenance period from 14 May to 10 June 2014)

	Liquidity providing	Liquidity absorbing	Net contribution
Contribution to banking system liquidity			
(a) Eurosystem monetary policy operations	**871.9**	**154.3**	**717.6**
Main refinancing operations	148.1		148.1
Longer-term refinancing operations	507.8		507.8
Standing facilities	0.1	28.3	-28.2
Other	215.9	126.0	89.9
(b) Other factors affecting banking system liquidity	**537.2**	**1,062.5**	**-525.4**
Banknotes in circulation		951.0	-951.0
Government deposits with the Eurosystem		111.5	-111.5
Net foreign assets (including gold)	536.8		536.8
Other factors (net)	0.4		0.4
(c) Reserves maintained by credit institutions (a) + (b)			**192.3**
including reserve requirements			*103.9*

Net contribution to banking system liquidity

(EUR billions, daily average for the reserve maintenance period from 14 May to 10 June 2014)



Sources: Banque de France, European Central Bank.

Produced 20 August 2014

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		
02/05/2013	08/05/2013	0.50	02/05/2013	08/05/2013	0.00	1.00
07/11/2013	13/11/2013	0.25	07/11/2013	13/11/2013	0.00	0.75
05/06/2014	11/06/2014	0.15	05/06/2014	11/06/2014	-0.10	0.40

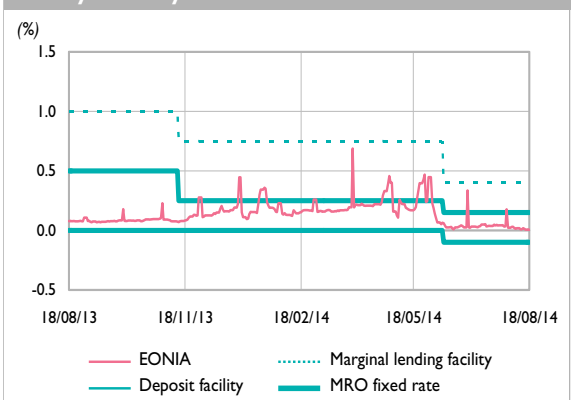
(%)

Main refinancing operations				Longer-term refinancing operations		
		Marginal rate	Weighted average rate			Marginal rate
2014	18 June [a)]	0.15	0.15	2014	11 August	0.15
	25 June	0.15	0.15		12 August	0.15
	2 July	0.15	0.15		13 August	0.15
	30 July	0.15	0.15		14 August	0.15
	6 August	0.15	0.15		15 August	0.15
	13 August	0.15	0.15		18 August	0.15

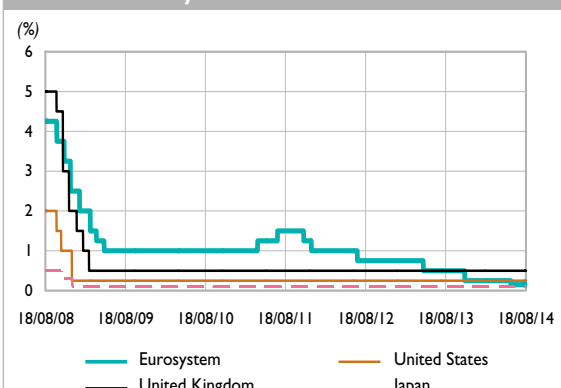
(EUR billions – rates as a %)

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	
2014	11 February	103.60	19.40	216.00	38.40	112.40	19.00	0.25
	11 March	102.80	19.80	201.10	33.50	98.30	13.70	0.25
	8 April	103.60	19.80	195.20	30.60	91.60	10.70	0.25
	13 May	103.50	20.00	191.20	34.70	87.70	14.60	0.25
	10 June	103.90	20.00	192.30	36.10	88.30	16.00	0.25
	8 July	104.40	20.30	214.30	38.60	109.80	18.30	0.15

Eurosystem key rates and EONIA



Central bank key rates



a) Fixed rate tender procedure.

Sources: European Central Bank, ESCB.

Produced 20 August 2014

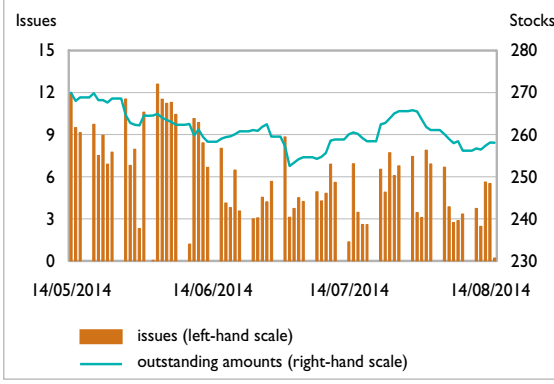
Table 28
Negotiable debt securities – France

Certificates of deposit

	EUR billions [a]		Number of issuers
	Issues	Stocks	
17/05/14 to 23/05/14	40.88	268.58	147
24/05/14 to 30/05/14	39.20	264.53	147
31/05/14 to 06/06/14	57.18	262.36	147
07/06/14 to 13/06/14	36.31	258.34	148
14/06/14 to 20/06/14	25.98	260.79	148
21/06/14 to 27/06/14	20.48	259.54	146
28/06/14 to 04/07/14	24.43	254.62	145
05/07/14 to 11/07/14	26.53	258.85	144
12/07/14 to 18/07/14	16.94	258.45	142
19/07/14 to 25/07/14	32.01	265.61	142
26/07/14 to 01/08/14	28.79	261.12	142
02/08/14 to 08/08/14	19.48	256.20	142
09/08/14 to 15/08/14	17.56	258.09	142

Certificates of deposit

(daily data, EUR billions)

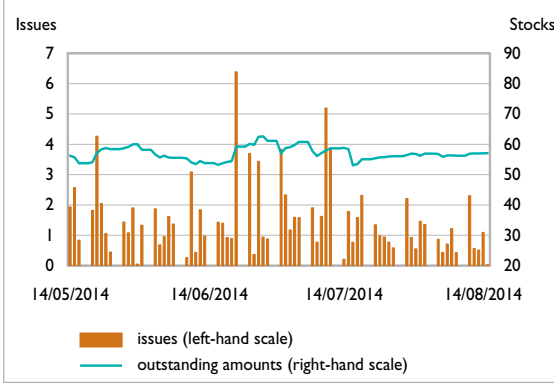


Commercial paper

	EUR billions [a]		Number of issuers
	Issues	Stocks	
17/05/14 to 23/05/14	9.63	58.42	101
24/05/14 to 30/05/14	5.80	58.20	102
31/05/14 to 06/06/14	6.50	55.51	102
07/06/14 to 13/06/14	6.60	53.79	102
14/06/14 to 20/06/14	11.03	59.25	98
21/06/14 to 27/06/14	9.32	61.16	95
28/06/14 to 04/07/14	10.52	60.81	95
05/07/14 to 11/07/14	13.34	58.67	98
12/07/14 to 18/07/14	6.65	55.09	101
19/07/14 to 25/07/14	4.63	56.11	99
26/07/14 to 01/08/14	6.50	56.89	98
02/08/14 to 08/08/14	3.66	56.25	100
09/08/14 to 15/08/14	4.49	57.08	100

Commercial paper

(daily data, EUR billions)

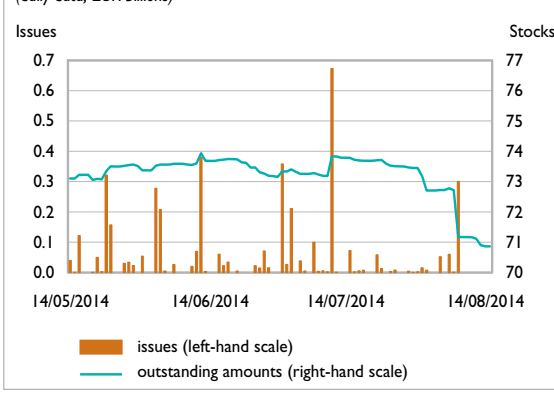


Negotiable medium-term notes

	EUR billions [a]		Number of issuers
	Issues	Stocks	
17/05/14 to 23/05/14	0.53	73.50	114
24/05/14 to 30/05/14	0.14	73.37	114
31/05/14 to 06/06/14	0.52	73.59	116
07/06/14 to 13/06/14	0.48	73.69	117
14/06/14 to 20/06/14	0.12	73.73	117
21/06/14 to 27/06/14	0.13	73.19	117
28/06/14 to 04/07/14	0.64	73.26	116
05/07/14 to 11/07/14	0.79	73.83	116
12/07/14 to 18/07/14	0.09	73.69	115
19/07/14 to 25/07/14	0.08	73.51	115
26/07/14 to 01/08/14	0.03	72.71	115
02/08/14 to 08/08/14	0.41	71.17	115
09/08/14 to 15/08/14	0.00	70.86	115

Negotiable medium-term notes

(daily data, EUR billions)



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

Source: Banque de France.

Produced 20 August 2014

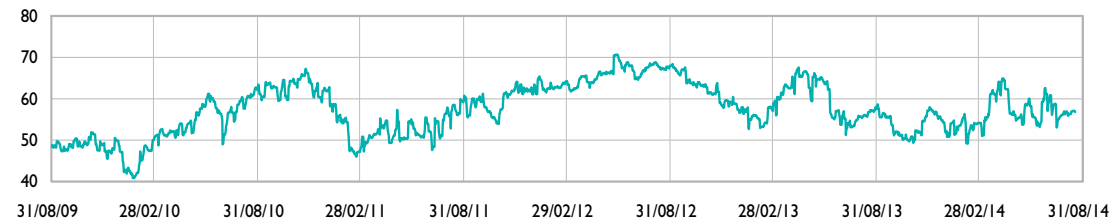
Table 29
Negotiable debt securities – France

Certificates of deposit

(daily outstanding amounts in EUR billions)

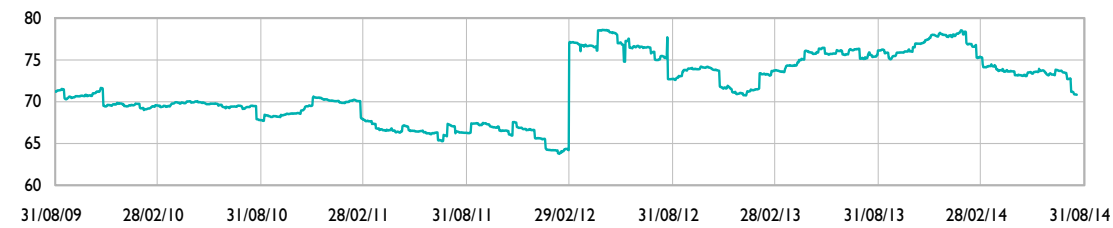
Commercial paper

(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.

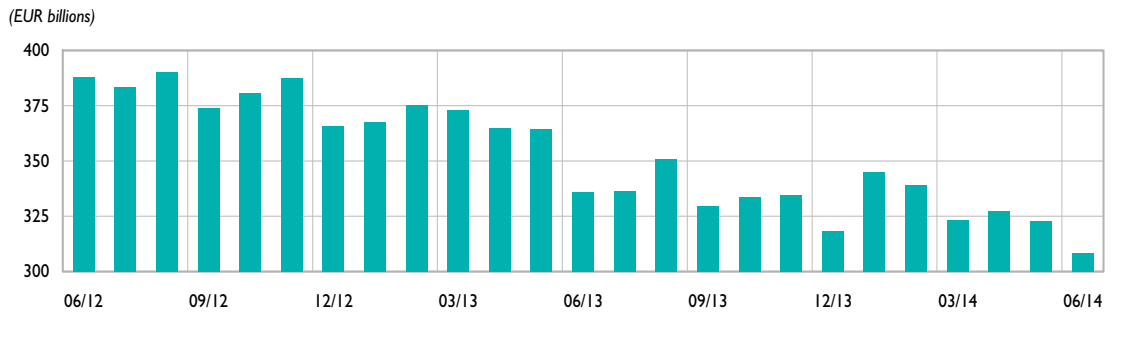
Produced 20 August 2014

Table 30
Investment funds' investments – France

(EUR billions)

	2013		2014	2014
	Sept.	Dec.	March	June
Net assets of investment funds' investments by category				
Money-market funds	329.53	318.23	323.32	308.41
Bond mutual funds	206.42	207.92	220.90	
Equity mutual funds	257.09	272.06	277.83	
Mixed funds	266.13	272.34	276.58	
Funds of alternative funds	12.41	12.50	12.66	
Guaranteed-performance mutual funds	0.00	0.00	0.00	
Structured funds ("fonds à formule")	45.33	43.04	41.57	

Net assets of money-market funds



Source: Banque de France.

Produced 20 August 2014

Table 31
Debt securities and quoted shares issued by French residents

(EUR billions)

	Outstanding amounts [a)]		Net issues [b)]			
	2013	2014	12-month	2014		
	June [c)]	June [c)]	total	April [c)]	May [c)]	June [c)]
Debt securities issued by French residents						
Total	**3,358.0**	**3,476.8**	**118.8**	**-6.8**	**12.0**	**23.2**
Non-financial corporations	483.0	534.3	51.3	2.3	8.2	10.2
Short-term (≤ 1 year)	*37.6*	*41.9*	*4.4*	*1.0*	*-0.5*	*-0.4*
Long-term (> 1 year)	*445.4*	*492.3*	*46.9*	*1.3*	*8.7*	*10.5*
General government	1,622.6	1,707.4	84.9	-2.6	6.4	10.3
Short-term (≤ 1 year)	*203.8*	*220.5*	*16.7*	*-5.9*	*0.2*	*2.2*
Long-term (> 1 year)	*1,418.7*	*1,486.9*	*68.2*	*3.4*	*6.2*	*8.0*
Monetary financial institutions [d)]	1,112.5	1,117.4	4.9	-3.6	-0.1	4.0
Short-term (≤ 1 year)	*270.9*	*240.8*	*-30.1*	*-5.5*	*-4.1*	*2.6*
Long-term (> 1 year) [d)]	*841.6*	*876.7*	*35.1*	*1.9*	*4.0*	*1.3*
Non-monetary financial institutions [e)]	139.9	117.7	-22.2	-2.9	-2.6	-1.2

(EUR billions)

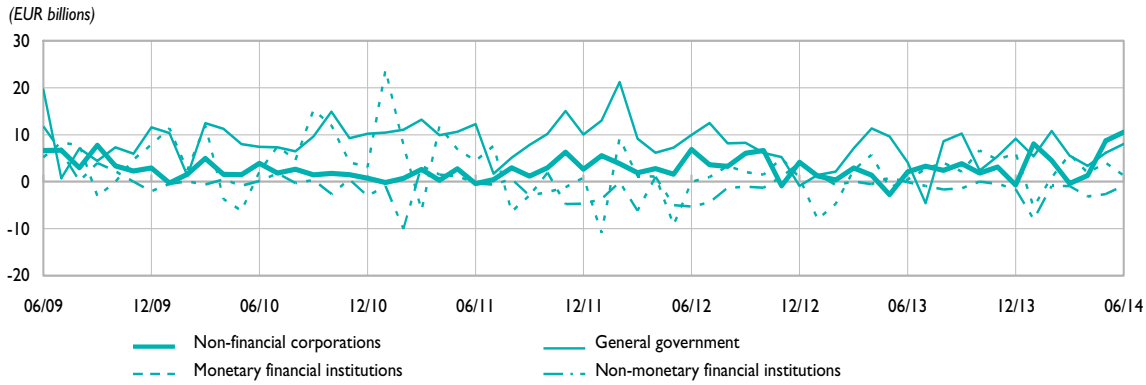
	Outstanding amounts [f)]		Net issues [b)]			Gross issues [g)]	Repurchases [g)]
	2013	2014	12-month	2014		12-month	12-month
	June	June	total	May	June	total	total
French quoted shares							
Total	**1,330.5**	**1,645.3**	**17.8**	**3.3**	**1.9**	**21.7**	**4.0**
Non-financial corporations	1,158.2	1,424.0	15.7	3.3	1.8	19.7	4.0
Monetary financial institutions	106.9	142.8	1.3	0.2	-0.2	1.3	0.0
Non-monetary financial institutions	65.4	78.5	0.8	-0.1	0.3	0.8	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.

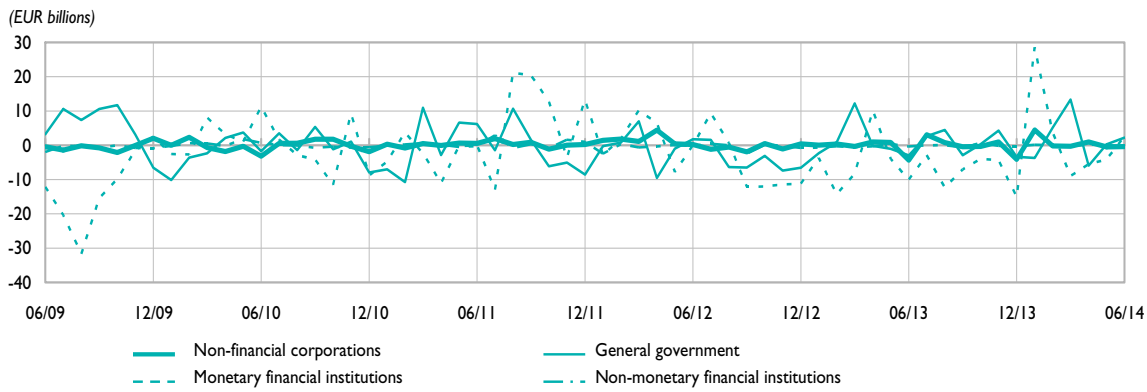
Source: Banque de France. *Produced 20 August 2014*

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

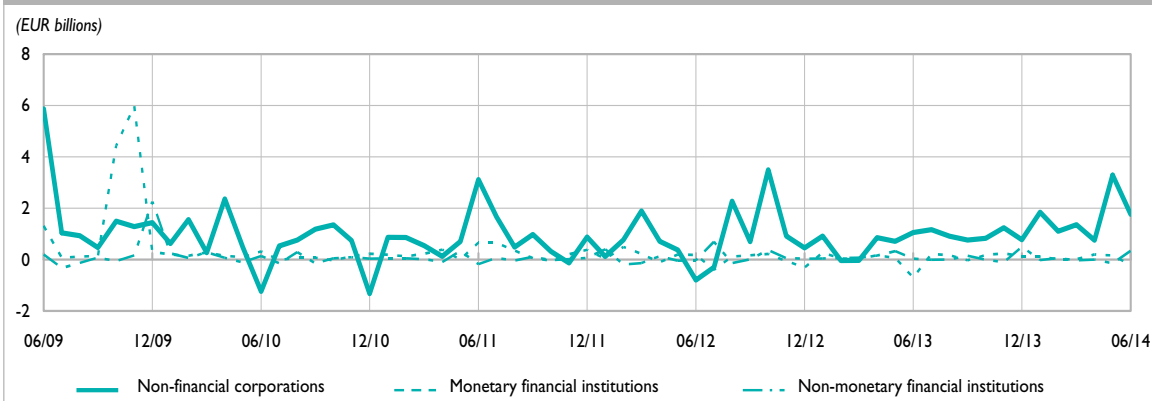
Net issues of long-term debt securities by French residents (seasonally adjusted)



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



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



Source: Banque de France.

Produced 20 August 2014

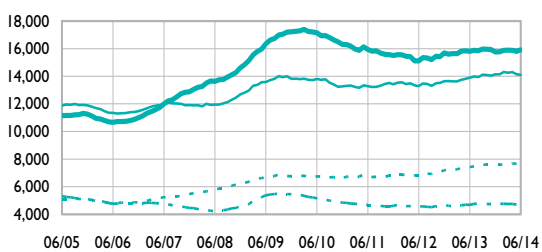
Table 33
Company failures by economic sector – France

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

	2013							2014					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June
Agriculture, forestry and fishing (AZ)	1,250	1,257	1,267	1,287	1,281	1,282	1,311	1,332	1,353	1,374	1,374	1,362	1,341
Industry (BE)	4,691	4,759	4,773	4,789	4,757	4,737	4,752	4,761	4,774	4,752	4,765	4,712	4,735
Construction (FZ)	15,812	15,884	15,852	15,977	15,962	15,942	15,764	15,773	15,877	15,894	15,883	15,826	15,910
Trade and automotive repair (G)	13,904	13,993	13,952	14,108	14,086	14,043	14,137	14,139	14,304	14,250	14,293	14,147	14,095
Transportation and storage (H)	1,921	1,910	1,915	1,946	1,963	1,970	2,001	1,996	2,029	2,027	2,007	2,003	1,975
Accomodation and restaurant services (I)	7,437	7,483	7,470	7,581	7,616	7,604	7,594	7,580	7,641	7,618	7,686	7,676	7,758
Information and communication sector (JZ)	1,520	1,567	1,559	1,546	1,559	1,579	1,604	1,599	1,610	1,636	1,629	1,607	1,583
Financial and insurance activities (KZ)	1,107	1,130	1,125	1,134	1,144	1,148	1,169	1,197	1,216	1,210	1,225	1,254	1,265
Real estate activities (LZ)	2,185	2,172	2,188	2,189	2,190	2,183	2,165	2,184	2,217	2,192	2,191	2,200	2,195
Business support activities (MN)	6,681	6,737	6,722	6,749	6,721	6,708	6,700	6,720	6,771	6,772	6,751	6,733	6,644
Education, human health, social work and household services (P to S)	5,222	5,308	5,322	5,348	5,351	5,324	5,351	5,366	5,436	5,450	5,444	5,405	5,312
Sector unknown	97	98	95	93	94	89	87	89	98	105	109	106	103
Total sectors	**61,827**	**62,298**	**62,240**	**62,747**	**62,724**	**62,609**	**62,635**	**62,736**	**63,326**	**63,280**	**63,357**	**63,031**	**62,916**

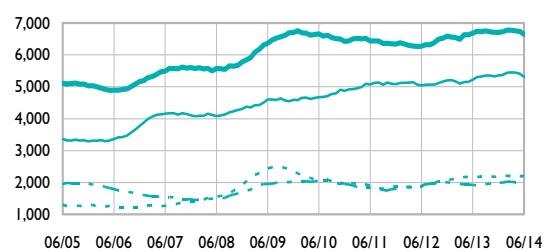
Company failures – 12-month total

(number of companies – unadjusted data)



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

(number of companies – unadjusted data)



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 2014

Table 34
Retail payment systems – France

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

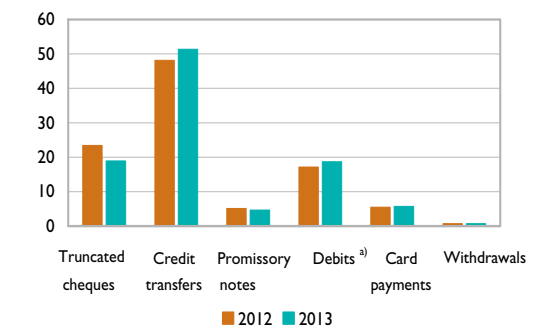
	2010	2011	2012	2013	2014			2014
					May	June	July	Share
Cheques	5,590	5,478	4,947	3,986	3,590	3,621	3,849	18.1
Credit transfers	8,865	9,646	10,167	10,827	10,468	11,673	11,500	54.1
of which SEPA credit transfers	683	2,555	4,130	5,967	9,897	11,249	11,298	53.1
Promissory notes	1,138	1,142	1,079	981	1,004	980	891	4.2
Direct debits	1,827	1,938	2,004	2,048	1,695	1,794	1,787	8.4
Interbank payment orders	133	130	131	129	132	56	66	0.3
Electronic payment orders	1,141	1,343	1,491	1,766	2,025	2,236	1,799	8.5
Card payments	1,009	1,085	1,152	1,200	1,250	1,290	1,228	5.8
ATM withdrawals	140	145	146	147	154	159	155	0.7
Total	**19,844**	**20,907**	**21,116**	**21,085**	**20,319**	**21,809**	**21,275**	**100.0**

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

	2010	2011	2012	2013	2014			2014
					May	June	July	Share
Cheques	9,507	9,112	8,588	8,040	7,291	7,465	7,465	13.9
Credit transfers	7,356	7,549	7,593	7,722	7,552	8,024	7,565	14.1
of which SEPA credit transfers	270	1,400	2,154	3,641	7,203	7,790	7,481	14.0
Promissory notes	311	303	291	281	295	286	267	0.5
Direct debits	8,194	8,502	8,680	8,737	7,593	8,337	8,644	16.1
Interbank payment orders	364	342	320	301	262	223	234	0.4
Electronic payment orders	66	76	101	127	166	94	158	0.3
Card payments	21,505	22,969	24,489	25,868	27,542	28,398	26,880	50.1
ATM withdrawals	2,375	2,422	2,407	2,397	2,509	2,602	2,400	4.5
Total	**49,677**	**51,275**	**52,469**	**53,472**	**53,211**	**55,429**	**53,613**	**100.0**

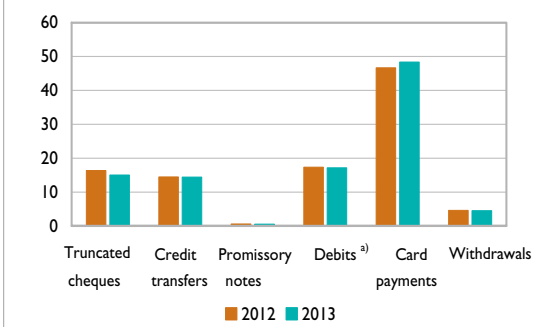
Market share developments for main non-cash means of payment

(% 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.

Sources: GSIT, STET.

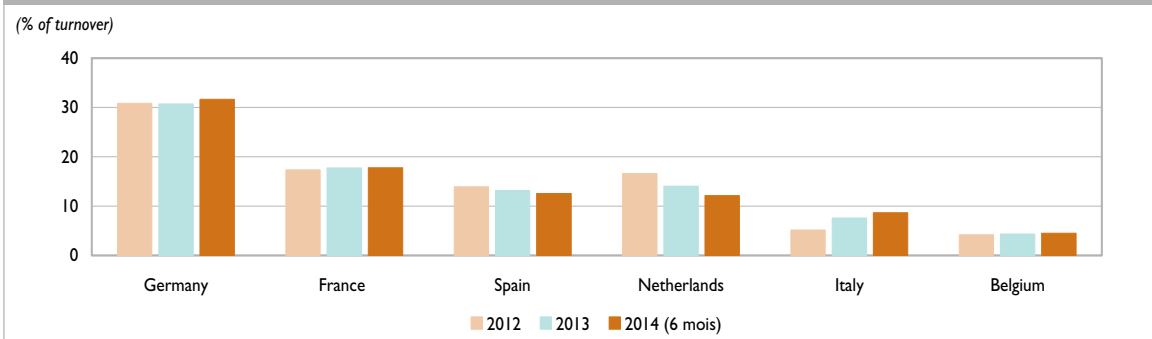
Produced 20 August 2014

Table 35
Large-value payment systems – EU

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

	2010	2011	2012	2013	2014			2014
					May	June	July	Share
France	365	398	431	343	367	366	335	17.6
Germany	829	818	764	594	653	639	592	31.1
Austria	27	27	25	21	30	30	30	1.6
Belgium	95	106	104	84	96	91	86	4.5
Cyprus	2	2	3	1	0	1	1	0.0
Spain	342	367	345	255	247	252	252	13.2
Estonia	–	1	1	1	1	1	1	0.1
Finland	35	47	85	39	39	40	40	2.1
Greece	28	23	20	34	30	24	25	1.3
Ireland	30	21	17	15	18	16	16	0.9
Italy	129	129	128	147	179	185	162	8.5
Latvia	–	–	–	–	1	1	1	0.1
Luxembourg	40	57	70	67	71	71	64	3.3
Malta	0	0	1	0	0	0	0	0.0
Netherlands [a)]	300	308	412	272	238	243	232	12.2
Portugal	20	22	14	11	11	11	12	0.6
Slovakia	3	3	3	2	3	3	2	0.1
Slovenia	2	2	3	2	2	2	3	0.1
EPM-ECB	37	36	35	29	40	41	40	2.1
Total TARGET2 euro area [b)]	**2,283**	**2,368**	**2,462**	**1,918**	**2,029**	**2,018**	**1,893**	**99.3**
Non-euro area	16	17	15	17	15	15	14	0.7
Total TARGET2 EU [b)]	**2,299**	**2,385**	**2,477**	**1,935**	**2,044**	**2,033**	**1,907**	**100.0**
Euro1 [c)]	**241**	**249**	**226**	**191**	**183**	**193**	**na**	

Market share of each financial centre in the TARGET2 system



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 2014*

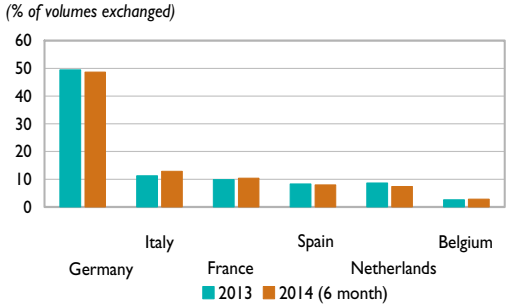
Table 36
Large-value payment systems – EU

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

	2010	2011	2012	2013	2014			2014
					May	June	July	Share
France	31,850	34,139	33,830	35,753	36,838	38,521	38,737	11.0
Germany	173,218	172,884	175,611	179,655	174,309	170,698	168,967	47.8
Austria	5,266	6,294	6,711	4,719	4,527	4,521	4,459	1.3
Belgium	9,454	10,265	9,955	9,322	10,685	10,760	10,413	2.9
Cyprus	466	515	613	872	576	591	571	0.2
Spain	29,195	29,509	29,760	30,105	28,031	28,666	28,544	8.1
Estonia	–	329	360	417	486	614	548	0.2
Finland	1,589	1,571	1,611	1,596	1,609	1,639	1,497	0.4
Greece	5,904	5,861	4,335	4,292	3,125	3,275	3,429	1.0
Ireland	4,961	4,376	4,012	3,589	3,604	3,476	3,450	1.0
Italy	33,649	33,643	34,837	40,711	47,544	48,559	46,288	13.1
Latvia	–	–	–	–	1,279	1,214	1,301	0.4
Luxembourg	3,033	3,229	3,509	4,398	4,814	4,754	4,754	1.3
Malta	65	72	157	236	357	396	401	0.1
Netherlands [a)]	33,304	32,490	33,144	31,300	25,717	24,983	24,250	6.9
Portugal	4,206	4,165	4,166	4,276	4,945	4,701	5,248	1.5
Slovakia	582	730	1,090	1,255	950	924	861	0.2
Slovenia	3,023	3,039	2,786	2,697	2,670	2,828	2,750	0.8
EPM-ECB	333	379	553	590	676	690	681	0.2
Total TARGET2 euro area [b)]	**340,099**	**343,488**	**347,040**	**355,785**	**352,742**	**351,809**	**347,150**	**98.3**
Non-euro area	3,281	5,017	7,145	7,313	6,092	6,063	6,164	1.7
Total TARGET2 EU [b)]	**343,380**	**348,505**	**354,185**	**363,099**	**358,834**	**357,872**	**353,314**	**100.0**
Euro1 [c)]	**343,380**	**348,505**	**354,185**	**363,099**	**231,821**	**231,283**	**na**	

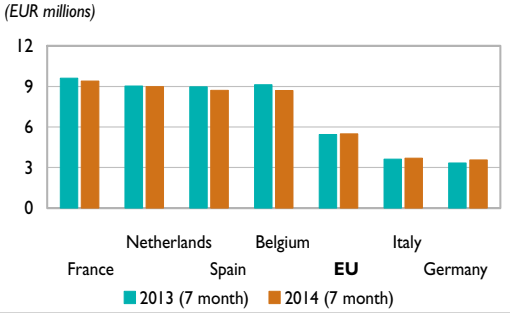
Market share of each financial centre in the TARGET2 system

(% of volumes exchanged)



Average transaction amount in the TARGET2 system

(EUR millions)



The sum of the components may not be equal to the total (or to 100) due to rounding.
Since January 2009, a new methodology for collecting and reporting statistics has been established on the TARGET2 data to improve data quality. This must be taken into account when comparing 2009 data with previous data.
a) Since 19 May 2008, the operations of the United Kingdom pass in transit by this country.
b) Variable composition according to the countries which participate in the systems of payment in euro.
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 2014*

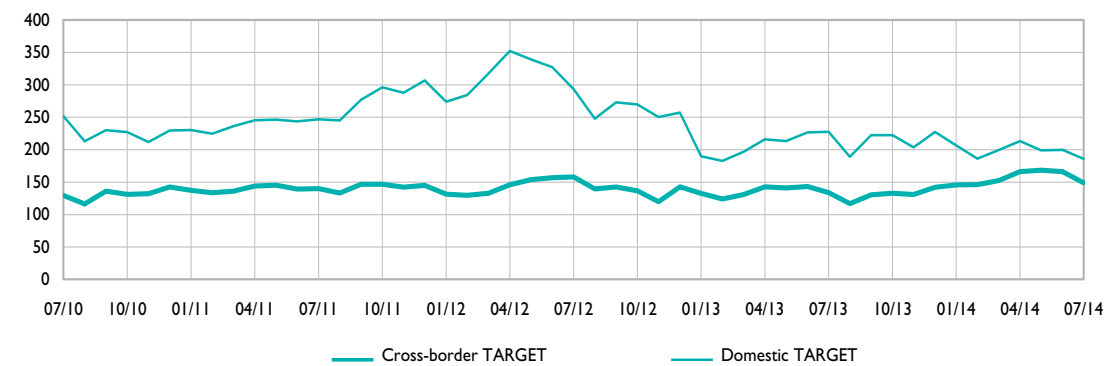
Table 37
Large-value payment systems – France

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

	2010	2011	2012	2013	2014			2014
					May	June	July	Share
Collateral used in domestic TARGET [b]								
French negotiable securities	105.7	81.6	127.4	109.8	68.6	66.5	64.8	23.9
Private claims	149.8	146.4	189.9	180.7	155.0	149.5	133.9	49.4
Securities collateralised through CCBM	76.9	60.5	53.7	63.7	60.7	65.1	67.3	24.8
Other securities [c]	5.9	3.5	2.7	3.4	5.1	5.4	5.3	2.0
Total	**338.3**	**292.0**	**373.8**	**357.6**	**289.4**	**286.5**	**271.3**	**100.0**

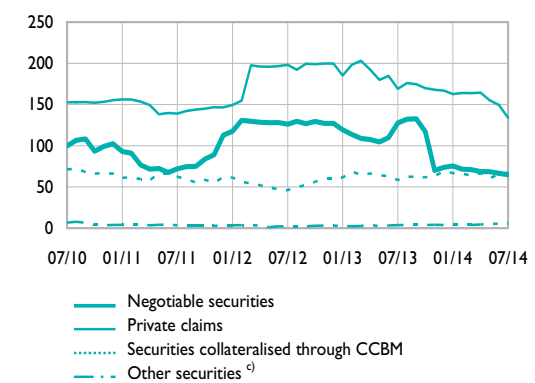
Monthly change in amounts exchanged in French payment systems [a]

(EUR billions, daily average)

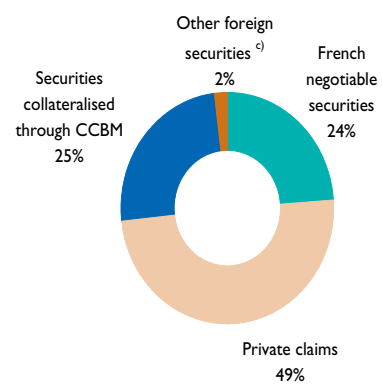


Monthly change in collateral [b]

(EUR billions, daily average)



Collateral used in July 2014 [b]



a) Since 18 February 2008, TBF (the French component of TARGET) and PNS systems have been replaced by TARGET2-Banque de France, the single French large-value payment system.
b) Until 15 February 2008, the indicated amounts corresponded to collateral used for intraday credit in TBF. Since the go-live of the "3G" system (Global management of collateral) and TARGET2-Banque de France on 18 February 2008, the amounts represent the collateral posted in a single pool of assets and that can be used for monetary policy and/or intraday credit operations.
c) Other foreign securities submitted via links between securities settlement systems.

Source: Banque de France. *Produced 20 August 2014*

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