☐ My personal details have changed.
Please update my subscription information accordingly:

Subscription number: ____________________________

First name: ____________________________  Surname: ____________________________

Company: ____________________________  Job title: ____________________________

Address: ____________________________

Post code: ____________________________  Town: ____________________________

Country: ____________________________

☐ I wish to cancel my subscription to the Quarterly Selection of Articles of the Banque de France:

Subscription number: ____________________________

First name: ____________________________  Surname: ____________________________

Company: ____________________________

This publication is being sent to you from the Banque de France since you are in its electronic contact list. Your details will not be divulged to third parties. If you wish to change your details or if you no longer wish to receive this publication, please let us know at any time by sending this printed form to: Banque de France 07-1397 SDRP Pôle Support aux relations externes 75049 Paris Cedex 01, or an e-mail to: diffusion@banque-france.fr.
CREDIT AND FINANCING

- **Consumer credit: recent trends and profile of borrowers**  
  Jérôme Coffinet and Christophe Jadeau  
  *The recovery in the consumer credit market in France has been accompanied by a decline in revolving credit facilities. Balance-reducing loans and revolving loans differ in the way they are used and in the profile of borrowers.*

MACROECONOMICS, MICROECONOMICS AND STRUCTURES

- **The 20th anniversary of the Banque de France Foundation for research in monetary, financial and banking economics**  
  Louis Bê Duc and Guillaume Horny  
  *For 20 years, the Banque de France Foundation has supported economic research through grants, prizes, subsidies, and its Visiting Scholars Programme. This article reviews the activity of the Foundation and reports on the anniversary conference, which focused on the specificity of economists and the social utility of finance.*

- **The Banque de France, research and patronage**  
  Henri Pagès  
  *There is now a consensus on the need for strong action to boost research. On the occasion of the Banque de France Foundation’s 20th anniversary, it seems fitting to take stock of the Bank’s policy on research and to examine how its patronage has encouraged “cross fertilisation” between the bank’s teams and the research community.*

ENTREPRISES

- **Financial situation of France’s main listed groups in H1 2015: lower profitability but a forward-looking financial strategy**  
  Laurent Carlino and Anne-Sophie Lafon  
  *The 80 largest French groups saw a sharp increase in their activity in the first half of 2015, chiefly on account of exchange rate effects. While their overall profitability declined, mainly due to unfavorable conditions in the energy and environment sector, their cash position reached a record level and investments rebounded.*
STATISTICS


OTHER DOCUMENTS

- Published articles 45
- Other publications available in English 49
Consumer credit: recent trends and profile of borrowers

The French consumer credit market continues to undergo significant change. Strong growth in consumer credit is not accompanied by an increase in the proportion of gross household income taken up by interest expenses, while the proportion of total new lending accounted for by revolving credit facilities is declining.

Revolving credit facilities are used more to finance one-off cash requirements, for small amounts, though they remain a driver of over-indebtedness. Furthermore, an analysis of borrowers with revolving credit facilities reveals a dichotomy between modest-income households, borrowing at high rates of interest, and more well-to-do customers, whose revolving credit facilities have characteristics similar to those of personal loans (also known as redeemable loans).

The redeemable loans market encompasses a more diverse range of situations. Loans for small amounts are mostly taken out by households with median annual incomes borrowing for terms of less than four years, while loans for larger amounts are more dispersed in terms of both loan term and household income. The interest rate on personal loans declines as the borrower’s income rises, with the impact reaching as much as several percentage points.

Key figures

2.1% annual growth rate of consumer loans to French households in June 2015

EUR 148 billion total outstandings on consumer loans and credit facilities held by French personal borrowers in June 2015

69% proportion of point-of-sale personal loans and credit facilities

83% proportion of over-indebtedness cases involving a consumer credit debt

19.8% one-quarter of all revolving credit facilities under EUR 3,000 have an annual percentage rate in excess of this threshold

Interest rate distribution in April 2015, by amount band

New revolving credit facilities

(annual percentage rate – APR; amounts in euro)
Households use short-term credit facilities (or consumer loans) to help finance their consumer spending. The support this provides for national output – but also for imports of goods and services – can thus take over from regular household income. The current economic environment, characterised by weak growth, helps make this a particularly important macroeconomic issue.

After highlighting the upturn in consumer credit observed in France since the second half of 2014, this paper analyses in greater depth the decline in consumer credit interest rates over the course of the year. It reveals a buoyancy that is atypical in Europe, explained by the specific characteristics of consumer loans taken out by French households.

**New consumer lending is buoyant and robust in France**

**Strong growth in consumer credit since the second half of 2014**

Following a period of slight contraction in 2012 and 2013, total consumer credit outstandings in France have been rising since June 2014 (see Chart 1). In this context, the annual growth rate of consumer credit in France (around 2% since October 2014) was still higher in June 2015 than in the main euro area countries (1.7% in Germany and Spain; 1.8% for the euro area as a whole), with the very recent exception of Italy (10.3%).

This growth in consumer credit comes at the same time as a slight improvement in the economic climate: household consumption in the euro area has been rising more strongly since the end of 2014. In France, the upturn in consumer credit is also linked to an increase in new vehicle registrations (see Chart 2). Indeed, the proportion of consumer credit debt used to purchase a vehicle is structurally predominant across all categories of loans with the exception of revolving credit facilities (see Appendix, Chart 1A). Furthermore, the monthly bank lending survey confirms an upturn in the demand for consumer loans since the second half of 2014 (see Appendix, Chart 2A).
Growth in consumer credit is driven by personal loans

In France, personal loans account for the majority of total consumer credit outstandings. In June 2015, of the EUR 148 billion in outstandings on short-term personal credit facilities, all general purpose personal loans and point-of-sale credit facilities (which include all specific-purpose personal loans and instalment credit sales), including securitised loans, represented EUR 102 billion, equating to 69% of the total (see Appendix, Chart A3). While redeemable loan outstandings are rising, the annual growth rate of revolving credit facilities is still negative, reflecting the substitution of personal loans for revolving credit facilities.

Since the introduction in 2011 of the new usury limits laid down in the Act of 1 July 2010 reforming consumer credit (known as the “Lagarde Act”) and the requirement for lenders to inform borrowers taking out revolving credit facilities of the option of taking out a personal loan, the decline in outstandings on revolving credit facilities has been accompanied by a redistribution of market share, with specialist institutions losing share to retail banks (see Appendix, Chart A4). In 2015, for the first time, the majority of revolving credit facilities were extended by non-specialist institutions.

The role of consumer credit in household over-indebtedness is declining

The upturn in consumer credit in France comes at a time when the ratio of household debt through consumer credit, which declined significantly between 2006 and 2013, has since held steady at a level slightly above that of the main euro area countries (see Chart 3).

Furthermore, while consumer credit debt continues to account for a predominant proportion of over-indebtedness cases, this proportion has been declining steadily since 2011. From 2011 to mid-2015, the proportion of over-indebtedness cases involving at least one property debt rose from 8.8% to 12.5%, while the proportion involving consumer credit debt fell from 90.4% to 84.3% (see Chart 4). Furthermore, over-indebtedness...
also has non-banking-related causes (job loss in 23% of cases, life events in 41% of cases and budget constraints in 17% of cases, while 14% of paths to over-indebtedness are characterised by the routine use of credit), the frequency of which is tending to increase.¹

**Significant decline in consumer credit interest rates in France**

**Decline in interest rates on personal loans and revolving credit facilities**

The reform of usury limits was intended to make new lending via revolving credit facilities more responsible by requiring lenders to propose a personal loan as an alternative solution to a revolving credit facility and bringing interest rates on the two types of loans closer together by applying common usury limit categories. Since the end of the transitional period and with interest rates declining across the board, usury limits as a whole have fallen significantly, with the exception of that applicable to loans under EUR 3,000.

In the latter category, interest rates are highly concentrated around the usury limit for revolving credit facilities for very small amounts. One of the findings of analyses in connection with the Lagarde Act is that the mechanism for regulating usury rates is effective when rates are scattered. Indeed, when the average rate is very close to the maximum rate (corresponding to the legal maximum), the definition of the usury limit (four-thirds of the average effective rate observed over the previous quarter) automatically perpetuates the concentration of rates around the limit. This can be seen with usury limits on consumer loans for amounts under EUR 3,000 (see Table 1).

More specifically, average rates go hand-in-hand – for some categories – with a high level of dispersion of the individual underlying rates. Interest rates on new personal loan facilities are thus spread across a wide range of values and remain far from the usury limit across all amount bands. Conversely, at least 25% of revolving credit facilities used in the month carry an interest rate close to the usury rate (see Chart 5).

While the across-the-board decline in consumer credit interest rates is natural in the current economic and monetary environment, the scale of this decline is greater in France than in both the euro area and the United Kingdom. As such, average interest rates applied in France are relatively low: 4.4% for redeemable loans and 6.6% for revolving credit facilities and overdrafts in June 2015 (see Appendix, Chart A5).

¹ See, in particular, the Banque de France study of paths to over-indebtedness: [https://www.banque-france.fr/fileadmin/user_upload/banque_de_france/La_Banque_de_France/etude-parcours-menant-au-surendettement-2015.pdf](https://www.banque-france.fr/fileadmin/user_upload/banque_de_france/La_Banque_de_France/etude-parcours-menant-au-surendettement-2015.pdf)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
</tr>
<tr>
<td>Up to EUR 3,000</td>
<td>20.30</td>
<td>20.29</td>
<td>20.09</td>
<td>20.23</td>
<td>20.27</td>
<td>20.35</td>
<td>20.28</td>
<td>20.25</td>
<td>20.23</td>
</tr>
<tr>
<td>More than EUR 6,000</td>
<td>11.48</td>
<td>11.48</td>
<td>11.05</td>
<td>10.52</td>
<td>10.35</td>
<td>10.21</td>
<td>9.79</td>
<td>9.47</td>
<td>9.21</td>
</tr>
</tbody>
</table>

Source: Banque de France.
Interest rates on redeemable loans in France have fallen more rapidly since 2014. This phenomenon is partly explained by a composition effect: since the Act entered into force, the maximum amount of consumer loans has risen from EUR 21,500 to EUR 75,000, while at the same time, the minimum amount for a renovation loan to be classed as a property loan has been raised to EUR 75,000. Renovation loans for amounts between EUR 21,500 and EUR 75,000 have thus moved from the category of property loans to that of consumer loans. Since such loans usually carry lower rates of interest than traditional short-term loans, and since their interest rates usually decline as the loan amount increases, the inclusion of new loans for large amounts has contributed to the observed decline in interest rates. In fact, the proportion by value of new personal loans represented by personal loans over EUR 6,000 increased from 58% in July 2013 to 62% in April 2015, while the proportion represented by loans under EUR 3,000 declined from 21% to 17%.

Interest rates are driven by loan characteristics (term/amount)…

Interest rates on personal loans are spread across the entire range of possible rates, reflecting in particular the variety of financial needs, the multiplicity of available financing solutions and the diversity of borrowers (see Appendix, Chart A6).

Multidimensional representations (see Charts 6a and 6b) show areas of concentration in loans extended to households depending on their characteristics (interest rate, amount and term). The darkest areas show the most frequently extended loans, emphasising areas of concentration in new lending. It thus appears that interest rate dispersion tends to increase with loan amount and decrease with loan term. Distributions are also heavily affected by rounding: the concentration of loans around certain interest rates and terms reflects the existence of standard financing solutions or the effect of marketing campaigns.
Interest rates on revolving credit facilities remain highly concentrated around levels close to the usury limit: for loans over EUR 3,000, while the lowering of legal limits has had a marked impact on interest rates observed, interest rate dispersion has not increased (see Chart 7). The empirical standard deviation of interest rates, which measures their dispersion, decreased
significant differences between January 2014 and April 2015, falling from 217 to 189 basis points for revolving credit facilities over EUR 6,000, and from 393 to 334 basis points for those between EUR 3,000 and EUR 6,000. Conversely, for loans under EUR 3,000, the usury rate held steady at around 20% in the second quarter of 2015 and effective interest rates remained relatively concentrated around their maximum level (20.3% of relevant loans carried an interest rate of between 20% and 20.23% in April 2015). The empirical standard deviation held relatively steady, rising from 552 basis points in January 2014 to 554 basis points in April 2015.

Average outstandings on revolving credit facilities in use remained below EUR 1,000 in most cases, reflecting the mainly one-off and limited use of this product type to meet cash shortfalls or make certain purchases, for example small household appliances (see Chart 8).

...but also by type of lender and borrower characteristics

Simple modelling of personal loan interest rates makes it possible to visualise the relationship between interest rate on the one hand and loan term and amount and borrower’s income on the other. Chart 9 represents interest rates on personal loans of various amounts by term and borrower’s income. Colours are also used to indicate concentration of loans by characteristic. Interest rates thus appear not only to increase with loan term, but also clearly to decrease with the borrower’s income. This latter effect can be as much as two percentage points on loans for large amounts. The analysis also serves to highlight the most common characteristics when extending new loans (shown in red in the charts), which correspond to loans to borrowers with annual incomes of between EUR 20,000 and EUR 40,000 and for terms of between two and four years for amounts between EUR 2,500 and EUR 3,000, and longer than four years for amounts between EUR 9,000 and EUR 11,000.

As regards revolving credit facilities, very significant divergences may be observed depending on the type of lender (retail bank or specialist institution): in June 2015, specialist institutions applied an average interest rate of 13.1%, compared with 4.8% for retail banks (see Appendix, Chart A7). Furthermore, the median annual income
of borrowers taking out revolving credit facilities is EUR 57,000 for customers using the traditional retail banking channel and only EUR 27,000 for those using specialist institutions. The combination of modest incomes and high interest rates may explain situations of over-indebtedness.

Interpretation: 6.1% of revolving credit facilities under EUR 3,000 extended by specialist institutions in July 2014 were for amounts between EUR 60 and EUR 120 and carried an interest rate of 20.35%.

Interpretation: 1.85% of revolving credit facilities under EUR 3,000 extended by banks in July 2014 were for amounts between EUR 60 and EUR 120 and carried an interest rate of between 12.6% and 13%.
An analysis of frequencies by narrow bands of interest rates and average outstandings confirms that loans under EUR 3,000 extended by specialist institutions mostly consist of very small loans at high rates of interest (see Chart 10a). Conversely, the retail banking channel shows a wider range of characteristics, whether in terms of the interest rate applied or the debit balance used (see Chart 10b).

For revolving credit facilities over EUR 6,000, the same duality by type of lender can be seen, though with a wider range of amounts.

* * *

Consumer credit plays an important role in financing the economy: by supporting household consumption, it contributes to growth. Since the Act of 1 July 2010 entered into force, there has been a gradual shift towards more responsible, diversified and competitive consumer lending. Outstandings on revolving credit facilities have declined, compensated for by an increase in personal loan outstandings, while providing the same overall level of support for demand.

A detailed analysis shows that the profile of borrowers holding revolving credit facilities differs significantly from that of those holding personal loans. Furthermore, interest rates on revolving credit facilities extended by specialist institutions appear, on average, to be higher than those on similar facilities extended by retail banks. The latter now account for a predominant share of the market. Finally, all other things being equal, interest rates on revolving credit facilities and personal loans decline — sometimes substantially — as borrowers’ income rises.

The Banque de France will continue to regularly analyse the detailed characteristics of consumer credit, in keeping with the importance of this source of financing and growth and its potential impact on the financial position of households, and particularly the most vulnerable among them.
Appendix
Additional detailed data

CA1 Initial purpose of consumer loans

a) Distribution of outstandings by initial purpose: personal loans

b) Distribution of outstandings by initial purpose: revolving credit facilities

c) Distribution of outstandings by initial purpose: instalment credit sales

d) Distribution of initial amounts by purpose: lease finance

Sources: Banque de France, Insee.
CA2  Lenders’ assessment of changes in supply and demand for consumer credit

(\%)

-75 -50 -25 0 25 50 75
-3 -2 -1 0 1 2 3

2012  2013  2014  2015  2016  2017  2018

- Increase
 Decrease

Source: Banque de France.
Note: The balance of responses is weighted based on the proportion of total outstandings represented by each bank. Monthly bank lending survey.

CA3  Breakdown of consumer loan outstandings by loan type

(\%)

49 14 10 10 8 5 4

Source: Banque de France.
Note: In the new statistical reports of December 2014, the distinction between instalment credit sales and personal loans was replaced by a distinction between point-of-sale loans (specific-purpose personal loans and instalment credit sales) and general purpose personal loans. Furthermore, the majority of outstandings on securitised consumer loans consist of personal loans in the broadest sense. Outstandings are seasonally adjusted.
CA4  Market share of outstandings on revolving credit facilities by type of lender

Source: Banque de France.
Interpretation: In March 2015, 49.1% of outstandings on personal revolving credit facilities were granted by traditional banks and 47.2% by specialist consumer credit institutions. The remaining 3.7% were granted by online banks and other specialist institutions.

CA5  Average interest rate on consumer loans

Source: Banque de France.
**CA6** Distribution of personal loan interest rates, by amount band

(horizontal axis: % interest rate; vertical axis: % proportion of total)

- **a)** Less than EUR 3,000
- **b)** EUR 3,000-6,000
- **c)** More than EUR 6,000

In January 2015, 3.4% of all personal loans under EUR 3,000 were extended at an interest rate of between zero and 1%.

**CA7** Average nominal interest rate on overdrafts and revolving credit facilities granted to households, by type of institution

In June 2015, the average nominal interest rate on overdrafts for traditional banking channels was 4.8%, while for specialist institutions, it was 13.1%.

Sources: Banque de France. Scope: Households and non-profit institutions serving households.
The 20th anniversary of the Banque de France Foundation for research in monetary, financial and banking economics

The Banque de France Foundation for research in monetary, financial and banking economics, recognised as being of public utility by Decree of 8 August 1995, has just celebrated its 20th anniversary. This article goes over the missions and governance of the Banque de France Foundation and describes its main actions for promoting and leading research. The article concludes by reviewing the work of the Foundation and the new prospects in a context marked by heightened research activity at the Bank and the creation of partnerships between the Bank and several universities. A separate box presents the anniversary conference held on 14 September 2015 at the Banque de France (see box: “The 20th anniversary conference of the Banque de France Foundation”).

Key figures

EUR 2.4 million research grants
EUR 0.8 million subsidies to research centres
425 recipient researchers
167 recipient academics
26 countries

Breakdown of research grants by country of residence
(grants 1997-2015, in EUR thousands, value 2015)

- United States
- France
- United Kingdom
- Italy
- Switzerland
- Spain
- Germany
- International organisations
- Other
Missions and governance

The aim of the Banque de France Foundation as set out in its statutes is to “promote theoretical and applied research in the field of monetary, financial and banking economics”. The Foundation therefore constitutes a patronage initiative aimed primarily at promoting research in monetary and financial economics, which is considered as a public good and is potentially useful for economic policy decision-making.1 In parallel, the Foundation has strived to develop links between academics, Banque de France economists and the financial community in general. In its twenty years of existence (see Box 1 “History and statistics”), the Foundation has set up a recognised programme of calls for research projects and several prizes for the benefit of young researchers. It has launched

Box 1

History and statistics

Milestones

1992 Decision of the General Council of the Banque de France to create a foundation for research in monetary, financial and banking economics.
1995 Creation of the Banque de France Foundation for research in monetary, financial and banking economics (with an initial capital of FRF 10 million) recognised as being of public interest (Decree of 8 August 1995).
1996 Creation of a Scientific Committee and launch of the first call for research projects.
1999 First “Journées” of the Foundation.
2002-2005 Economic policy forums bringing together academics and “practitioners”.
2004 Creation of the Visiting Scholars Programme.
2005 Creation of the Scientific Council that incorporates the former Scientific Committee (renamed the Evaluation Committee).
2008 Creation of the Young Researcher in Economics Prize.
2011 Creation of the biannual Joint French Macro Workshop.
2013 Launch of the Foundation’s twitter account, @fondationBDF for making announcements.

Key figures (1995-2015)

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of researchers who have participated in Foundation programmes</td>
<td>425</td>
</tr>
<tr>
<td>Countries of residence of researchers</td>
<td>26</td>
</tr>
<tr>
<td>Number of recipient research centres</td>
<td>167</td>
</tr>
<tr>
<td>Number of research grants awarded</td>
<td>81</td>
</tr>
<tr>
<td>Total amount awarded in grants (in 2015 euro a)</td>
<td>2,367,554</td>
</tr>
<tr>
<td>Number of Google Scholar citations (August 2015)</td>
<td>8,400</td>
</tr>
<tr>
<td>Number of recipients of the Thesis Prize</td>
<td>18</td>
</tr>
<tr>
<td>Number of recipients of the Young Researcher Prize</td>
<td>22</td>
</tr>
<tr>
<td>Seminars</td>
<td>158</td>
</tr>
<tr>
<td>Economic Policy Forums</td>
<td>5</td>
</tr>
<tr>
<td>Joint French Macro Workshops</td>
<td>8</td>
</tr>
<tr>
<td>Journées de la Fondation</td>
<td>10</td>
</tr>
<tr>
<td>Number of visiting scholars</td>
<td>99</td>
</tr>
<tr>
<td>Amount of subsidies granted (in 2015 euro a)</td>
<td>814,331</td>
</tr>
</tbody>
</table>

Source: Banque de France Foundation, authors’ calculations.

a) Based on HICP.

1 For the link between the Banque de France, its research activities and its research sponsorship policy, see the article by Pagès (H.) “The Banque de France, research and patronage” in this QSA.
a very appreciated visiting scholars programme. It has also regularly funded major national and European research associations. Finally, it has organised numerous events (seminars, workshops and conferences).

The Foundation is governed by a Board of Directors, chaired by the Governor of the Banque de France and composed of three other Banque de France administrators, representatives of research institutions (universities and international research organisations) and government representatives, notably from the Ministry of the Economy and Finance and the Ministry of Research and Higher Education. In addition, the Foundation is assisted by a Scientific Council composed of twenty renowned French and foreign academics (and representatives of international organisations). This body expresses an opinion on the topics of the calls for project proposals and on any matter relating to the Foundation’s strategy or activity. A subset of this Council, the Evaluation Committee, assesses the research projects received following the calls for proposals. The Foundation’s governance is thus multiparty and open to the academic world, which is conducive to the development of common interest initiatives in favour of economic research.

Promoting research through research grants and prizes awarded to young researchers

Awarding research grants to promote the highest standard of research across the world

Calls for research projects are the Foundation’s flagship programme for promoting economic research. The Foundation’s research grants are awarded to teams affiliated to universities or other research bodies. Once the research topics have been decided by the Board of Directors, after consultation with the Scientific Council, projects are selected through a call for tenders published on the Bank’s website and on the websites of international research networks. The proposals received are examined by at least two members of the Evaluation Committee and assessed according to several criteria which determine the validity of the project and the credibility of the research team. The Board generally selects a shortlist of eight projects, which are presented to the Evaluation Committee at a seminar held behind closed doors. The final decision is taken by the Board based on the opinion of the Evaluation Committee. Typically, the Foundation awards four research grants per year, representing a total of around EUR 120,000. Once the project has been selected, the winning teams must aim to carry out their research according to the selection criteria of leading scientific journals. A preliminary version of the project is presented at a Banque de France seminar open to the public. The finalised project is also presented at an international conference, the Journée de la Fondation, organised every two years.

The Foundation’s research grants programme has proved a resounding success since its launch, with about sixty high-level applications in the main areas of monetary, financial and banking economics. The Foundation has awarded 81 research grants, representing EUR 2.4 million, to 180 researchers affiliated to 89 universities and research centres worldwide. The articles funded by these grants have been published in the best scientific journals such as the American Economic Review, the Journal of Finance, the Quarterly Journal of Economics, and the Review of Economics Studies (see Chart 1 and Tables 1 and 2). A large number of these articles have proved influential, as measured by the number of projects cited in the “Google Scholar” search engine (see Table 3).

2 For detailed elements of the Foundation’s activity over its first twenty years of existence, see also Bé Duc (L.) (2015), “Foundation’s 20th anniversary booklet”. See also the website of the Foundation: www.fondationbdf.fr

3 For a list of grants awarded by the Foundation, see the appendix of the Foundation’s 20th anniversary booklet (2015) or the Foundation’s website: www.fondationbdf.fr
The Thesis Prize and the Young Researcher in Economics Prize

The Thesis Prize of the Banque de France Foundation was created in 2001. It aims at rewarding the best thesis in monetary, financial and banking economics. Since 2007, the prize, which amounts to EUR 3,000, has been awarded in partnership with the Association française de science économique (AFSE). The jury is composed of members appointed by the Foundation and by the AFSE and the Foundation Prize is awarded at the annual conference of the AFSE.

The Young Researcher in Economics Prize, introduced in 2008, is awarded to researchers in economics affiliated to a French university and who have held a PhD for less than five years. This prize consists of a financial award (currently EUR 3,000) and the funding of a partial release from teaching hours (maximum of 80 hours of teaching over the following two academic years). The Foundation provides financial compensation to the university or research institute that has released the prize-winner from his/her teaching duties. In the opinion of the prize-winners, the funding of a partial release from teaching is very useful for freeing time for research at the start of their career.

---

The Thesis Prize and the Young Researcher in Economics Prize

The Thesis Prize of the Banque de France Foundation was created in 2001. It aims at rewarding the best thesis in monetary, financial and banking economics. Since 2007, the prize, which amounts to EUR 3,000, has been awarded in partnership with the Association française de science économique (AFSE). The jury is composed of members appointed by the Foundation and by the AFSE and the Foundation Prize is awarded at the annual conference of the AFSE.

The Young Researcher in Economics Prize, introduced in 2008, is awarded to researchers in economics affiliated to a French university and who have held a PhD for less than five years. This prize consists of a financial award (currently EUR 3,000) and the funding of a partial release from teaching hours (maximum of 80 hours of teaching over the following two academic years). The Foundation provides financial compensation to the university or research institute that has released the prize-winner from his/her teaching duties. In the opinion of the prize-winners, the funding of a partial release from teaching is very useful for freeing time for research at the start of their career.

---

The Thesis Prize and the Young Researcher in Economics Prize

The Thesis Prize of the Banque de France Foundation was created in 2001. It aims at rewarding the best thesis in monetary, financial and banking economics. Since 2007, the prize, which amounts to EUR 3,000, has been awarded in partnership with the Association française de science économique (AFSE). The jury is composed of members appointed by the Foundation and by the AFSE and the Foundation Prize is awarded at the annual conference of the AFSE.

The Young Researcher in Economics Prize, introduced in 2008, is awarded to researchers in economics affiliated to a French university and who have held a PhD for less than five years. This prize consists of a financial award (currently EUR 3,000) and the funding of a partial release from teaching hours (maximum of 80 hours of teaching over the following two academic years). The Foundation provides financial compensation to the university or research institute that has released the prize-winner from his/her teaching duties. In the opinion of the prize-winners, the funding of a partial release from teaching is very useful for freeing time for research at the start of their career.
of their academic career when the teaching load (preparation of new courses) is substantial.

Supporting research through subsidies, the organisation of events and the visiting scholars programme

The Foundation has contributed to supporting economic research by providing financial subsidies to associations and research institutes and by organising seminars and symposiums, as well as through its visiting scholars programme. These actions have fostered rich and numerous interactions between academia and the Banque de France.

Supporting associations and research institutions

Since its creation, the Foundation has awarded approximately EUR 814,000 in subsidies. Two-thirds of the funds have gone to a dozen associations and other research institutions, and the remaining third has been used to fund the organisation of symposiums and seminars (close to 150 events have been financially supported by the Foundation). Table 4 presents the main associations and events that have received funds since 1996.
Organising seminars, workshops and symposiums

The seminars, workshops and conferences organised by the Foundation have given rise to many exchanges between Bank economists, university academics and financial sector participants. Overall, more than 300 research papers have been presented at events organised by the Foundation. Among these events, it is worth noting the creation in 2011 of the Joint French Macro Workshop aimed especially at young macroeconomists based in Europe and co-organised with some of the leading French research centres: École Polytechnique/CREST; PSE; Sciences Po and TSE.

The Visiting Scholars Programme

The Foundation’s Visiting Scholars Programme was set up in 2004. It enables researchers selected via a tender process to spend between one and three weeks at the Banque de France and exchange with in-house teams as well as with the academic community. These collaborations have led to the publication of a large number of joint papers (22 joint working papers, and five articles published in peer-reviewed journals, and four other projects currently under review). While the indirect effects of these visits seem more difficult to measure, the feedback from the visiting scholars and the Bank teams are very positive. Overall, close to 100 researchers, from 20 different countries (see Chart 2a), have been invited by the Foundation to work on a relatively wide range of topics (see Chart 2b). In addition to the Visiting Scholars Programme, it is worth mentioning the visits by recipients of research grants at the Bank and other research centres in France. These visits have been part of the grants programme since 2013.

Assessment and outlook

For twenty years, through its research grants, the Banque de France Foundation has contributed to promoting cutting-edge economic research by fostering international collaborations. In doing so, the Foundation has also endeavoured to foster French universities by granting subsidies to major national research associations, by encouraging grant applications from candidates affiliated to a French university and by financing stays in France of renowned foreign researchers. In addition, the Foundation has played a federative role, as evidenced by the creation under its aegis of the Joint French Macro Workshop co-organised with a number of leading French universities such as the Toulouse School of Economics, the Paris School of Economics and Sciences Po. This workshop also illustrates the Foundation’s policy of providing strong support to promising “young researchers”, which is also evidenced by the creation of the “Young researcher in economics” prize and the Foundation’s explicit intention to encourage, when awarding grants and for projects of equal scientific quality, those projects led by young teams.

6 Visit of at least one week for one of the researchers of the winning teams, who is not affiliated to a French university.
Over the past few years, the Banque de France has significantly increased its commitment to economic research. Far from restricting the Foundation’s role, this action has on the contrary had a positive impact via the increased participation of Bank researchers in the Foundation’s programmes, in particular the Visiting Scholars Programme. Fundamentally, the Foundation’s scope of intervention appears to strongly complement the Bank’s university partnerships. The latter aim at supporting a number of “national champions”, while, through its calls for research proposals, its Visiting Scholars Programme, and its Young Researcher Prize, the Foundation targets all universities and research centres in France and abroad. In addition, the Foundation’s flexibility and visibility enable it to regularly launch new initiatives to promote economic research and encourage cooperation.

To this day, the Foundation has helped over 400 researchers from 30 countries affiliated to 170 research centres. As said by Governor Christian Noyer in the preface of the Foundation’s 20th anniversary booklet (2015): “The results of the Foundation have been extremely positive and it is essential that it continue its work. Its actions are helping to push back the frontiers of economic knowledge for the benefit of society, a goal which is one of the core missions of the Banque de France”.

Box 2

The Foundation’s 20th anniversary conference
(Banque de France, 14 September 2015)

The Foundation was recognised as being of public interest by a decree of 8 August 1995. To celebrate its 20th anniversary, the Foundation organised a conference at the Banque de France. Chaired by Governor Christian Noyer, this conference was an opportunity to examine the specificities of economists and the role of finance in society, on the basis of studies by Yann Algan (Sciences Po) and Luigi Zingales (Chicago Booth). The first study was discussed by Ramon Marimon (European University Institute and Universitat Pompeu Fabra) and Lucrezia Reichlin (London Business School), and the second by Augustin Landier (Toulouse School of Economics) and Silvana Tenreyro (London School of Economics). The remainder of this box briefly describes the main ideas brought up during the conference.1

In his opening speech, Governor Christian Noyer stressed that the two studies provided an opportunity to examine, in a slightly provocative manner, the characteristics, the role and the impact of research in economics and finance.

In the first speech, Yann Algan presented his study on the characteristics of economics in relation to other social sciences in the United States.2 He started by documenting, using bibliometric data, the relative insularity of economics. He then analysed the reason why economics has a hierarchical structure, which is unusual among the social sciences. He emphasised that, compared to specialists in the other social sciences, economists enjoy a more favorable financial situation (many economists teach in business schools.

1 An excerpt and the full film of the conference are available on the website of the Foundation www.fondationbdf.fr (page “Journées”).
and have consulting activities), have a more individualistic view of the world and display a confidence in the ability of their discipline to solve the world’s problems. All of these characteristics are what the authors call the “superiority of economists”, which is closely linked to subjective feelings of authority and legitimacy. Yann Algan stressed that, while this superiority has no doubt contributed to economists’ concrete involvement and their significant influence in the economy, it has also exposed them to greater conflicts of interest, political criticism and even derision.

Ramon Marimon opened the discussion following this first speech. He mentioned that given the strong interaction between science and politics, the situation of economics was different to that of other social sciences, and was perhaps closer to engineering. This situation naturally leads to the emergence of a consensus on the key ideas in this field, including the idea of a hierarchical structure based on a publication criterion. This hierarchical structure implies the prevalence of income differences both among economists and in relation to other social sciences. The publication criterion has the disadvantage of fostering a certain “endogamy”, which encourages economists to value publications not in absolute terms but in terms of the authors’ affiliations. He also mentioned the fact that the move towards more applied research, which has been observed in recent decades, can help reconcile economists and society.

Lucrezia Reichlin continued the discussion. She highlighted the fact that the characteristics that distinguish economics from other social sciences can be explained by economic mechanisms. For example, the heterogeneity of economists’ remunerations can be seen as resulting from market forces, the relevance of their contributions in political terms generating differences in material situations. She also mentioned the fact that, as profits are higher in economics than in other social sciences, there is greater competition and therefore more hierarchy. She also identified the main changes in the economic environment, stating that the latest crisis had marked the end of a 30-year period, characterised by moderate inflation and low macroeconomic volatility. These developments call into question the existing views on monetary policy and will ultimately affect the current hierarchy. She also defended the view that the shift from a causal reasoning to a predictive reasoning could improve the contribution of economics to public authorities’ decision-making, and therefore improve the way in which economists are viewed.

In the second speech, Luigi Zingales addressed the issue of how finance influences society. He emphasised the existing consensus among economists that the benefits of finance outweigh its costs. However, several surveys indicate that this view is not shared by the general population. Luigi Zingales explains part of this dissonance by the fact that academics underestimate how finance can, in the absence of appropriate rules, degenerate into rent capture. He stressed what finance theorists could do to reduce this dissonance, in the field of research and in that of education. First, he encouraged economists to recognise that they overestimate the benefits of finance. Second, he emphasised the role that economists should play in limiting rent-seeking in the financial sector. He also suggested that academics be more involved in policy formulation and become aware of the fact that they may inadvertently teach behaviour patterns that fuel rent captures and crises.

Augustin Landier opened the discussions on the second study. He recalled that since the 14th century at least, finance has been perceived, to a certain extent, as unethical or even dangerous. He suggested that the public’s aversion was partly due to the peculiarities of research in financial economics. First, scientific journals have tended in recent decades to value contributions that conclude in favour of the opacity of

---

finance, or studies reporting embezzlement. Moreover, these topics are dominated by the prevalence of a small number of scientific journals and contributors, which encourages conformism. Finally, he highlighted the disconnection between research and education, which gives rise to misunderstandings between university academics and the general public.

Silvana Tenreyro continued the discussion. She stressed that Americans’ negative opinion of finance was linked to the 2008 crisis, which was triggered by finance. This crisis drew the public’s attention onto the key players who behaved in an unethical and sometimes dangerous manner, thus contributing to risk accumulation before the crisis. She also argued that in the public perception, whether this is justified or not, finance was partly associated with rising inequality. She also pointed out that the public’s aversion could bring about useful reactions such as greater attention to regulation and its implementation, greater involvement of economists in understanding the benefits of financial services, and a reallocation of skills towards more socially responsible activities. She recommended that economists react to this “anti-finance” sentiment by paying closer attention to the forecasting of systemic crises, as well as to the definition and implementation of optimal policies and regulations.

The discussions were followed by the awarding of the Foundation’s Young Researcher in Economics Prize. The first Deputy Governor, Anne Le Lorier, awarded the 2014 prizes to Yinghua He (Toulouse School of Economics) for his work on the influence of institutions and regulation on the behaviour of economic agents, and to Johan Hombert (HEC Paris) for his analyses of the microstructure of financial markets and corporate finance. The 2015 prizes were awarded to Paul Hubert (OFCE-Sciences Po) for his work on central bank communication and its interactions with the formation of expectations by economic agents and to Christophe Spaenjers (HEC Paris) for his analyses of households’ financial decisions, in particular investment decisions in non-standard products such as luxury goods.

In his closing speech, Governor Christian Noyer emphasised how the Banque de France Foundation had succeeded in promoting the highest standard of academic research. He recalled the Foundation’s support to precursory research projects, on topics that were recognised as being of key importance only many years later. He referred to, among others, the study by Freixas, Parigi and Rochet which stressed, as early as 2000, i.e. eight years before the financial crisis, the important role played by transactions between banks in spreading risks. Christian Noyer pointed out that by supporting academic studies over the past twenty years, including studies not directly related to the immediate needs of central banks, the Foundation had encouraged contributions that were useful for monetary policy and thus beneficial to society itself.

The Banque de France, research and patronage

Although research into economics and finance was not seen as falling within the core activities of central banks until the beginning of the 2000s, there is now consensus on the need for strong action to boost research. Firstly, promoting high quality research, evidenced through publications in renowned journals, is a sign of credibility and strengthens public confidence. Beyond this signal effect, however, the strongest rationale for research in central banks lies in its role as a catalyst for a disciplined policy-making process and as a source of greater efficiency in fulfilling its core activities. In a forceful petition for research in European bodies, a recent external evaluation report states in this respect that “research is becoming increasingly important as the foundation for the influence of individuals in the group”.

On the occasion of the Foundation’s 20th anniversary, it seems fitting to take stock of the Banque de France’s policy on research and to examine how its influence has encouraged cross-fertilisation between the bank’s teams and the research community.

The first section provides an assessment based on key results and lessons drawn from the external evaluation conducted by a team of independent experts in 2014.

The second section illustrates how patronage and sponsorship complement internal research, examining the various approaches explored to date: pure sponsorship in the form of impartial support for academic research, or directed sponsorship partnerships designed to advance research through dialogue with a choice of institutional partners.

The final section provides an overview of the symbiosis between the two approaches: the Foundation, focused on supporting the best projects, and partnerships, based on productive cooperation with the best institutions. It seeks to highlight the benefits and potential limitations of this dichotomy and its relationship with internal research.

Keywords: research, patronage, sponsorship, partnerships, Foundation

JEL codes: A10, A11, D83, E58


Taking stock of research at the Banque de France: an external evaluation

The Banque de France now ranks in the top three central banks within the Eurosystem in terms of economic research, and in the top ten worldwide. The aforementioned report by three renowned experts, appointed by the Governor to assess the scientific quality of research and its policy relevance, confirms these developments and emphasises that the progress made has exceeded expectations in terms of the quantity and above all the quality of publications in internationally refereed journals over the previous six years. It also welcomes partnerships with universities in terms of the development of a stimulating intellectual environment and the promotion of the bank’s internal research to the research community.

By significantly strengthening its research teams in 2007, the Banque de France both bolstered its external credibility, increasing public confidence, and equipped itself with the conceptual expertise to extend its influence in public debate and with international bodies. The rules governing research, which in the past could sometimes be perceived as restrictive, have gradually developed into a common language facilitating communication among researchers from different backgrounds and helping them reformulate questions facing policymakers through an astute use of economic science tools.

Valuing researchers

That said, the report highlights the fact that competition among central banks is growing. Its recommendations are therefore aimed at strengthening the ongoing process of improvement in order to best exploit the synergies between research and policy work. In the field of communication, for example, it calls for greater involvement of the Executive Committee in the definition of top research priorities over the next one to two years and for more detailed feedback on the quality and usefulness of policy briefing notes. It recommends that speeches that draw on research explicitly reference this research. The report also places great emphasis on human resources. To value and motivate teams, it suggests that a career path be defined for experts with promotions linked to increased expertise, as is the case in some major central banks. It advocates mobility through temporary internal secondments, ensuring a better balance of time and resources allocated to research in units associated with the bank’s core mission. Lastly, other recommendations, such as the completion of a single platform for data access or external evaluation devoted to forecasting models, are in line with processes already underway or already in place at the bank.

A wider audience

The report also emphasises the responsibility of researchers in terms of communicating not only internally, with the Governor and Deputy Governors, but also externally with the public. The efforts to ensure the quality of research, highlighted by its publication in international journals, has recently been accompanied by a drive to provide economic and financial education to a broader public including journalists, market economists, teachers and students. In parallel with the working papers published on the Banque de France’s website for a closed circle of specialists, researchers are also working to broaden their audience through the publication entitled Rue de la Banque, which takes its title from the road of the same name. In these publications they summarise their views on a research topic in clear, direct and user-friendly language, enhanced with charts and including a bibliography for those who wish to read about the subject in more depth.

1 Rue de la Banque publications can be accessed at https://www.banque-france.fr/en/publications/economic-documents/rue-de-la-banque.html
The Banque de France as a sponsor and internal research

When developing a research strategy over the past twenty years the bank has had to find a balance between seemingly conflicting objectives.

Immediate challenges and long-term goals

Firstly, there is a trade-off between institutional priorities and scientific quality. Research has to meet daily policy briefing requirements while maintaining visibility in international publications. Maximizing its usefulness to the bank – responding to short-term concerns, basing decisions on economic arguments, clarifying immediate economic policy challenges – reduces the capacity of research to mobilise teams for long-term high quality projects. If researchers are expected to devote most of their time to analysing economic policy at the expense of research that can be published, there is obviously a risk of losing talented researchers, who will try their luck elsewhere. Ultimately this will hinder policy-making by reducing both the quantity and quality of analysis. Conversely, if central bank units are made into extensions of university departments, there is a risk that the balance between researchers and policymakers will be impaired, ultimately leading to a situation in which each camp sticks firmly to its own views without an exchange of knowledge and experience between the two.

There is also a compromise to be found between internal and external research. Internal researchers must be encouraged to work in harmony with accomplished academics, whilst the latter, who are used to giving free reign to their thoughts, must be encouraged to meet with internal researchers as often as possible. Although it is difficult to predict what topics will come out of this sort of interaction, under the guidance of experienced professionals the host institution can learn how to focus research on relevant economic policy issues. By allocating part of the staff’s time to accommodating the demands for policy analysis, rewarding advice on policy-making, opening policy issues to group discussions, top managers’ concerns can wend their way into research activities and be met with insightful responses.

Pure sponsorship and directed sponsorship partnerships

The Banque de France’s leverage in these trade-offs is research sponsorship. Through pure sponsorship, it promotes research without conducting it itself, prioritising the analysis of favourite topics and encouraging the communication and publication of this independently conducted research. Policymakers have long taken into account current economic research, whether this be, for example, on the relationship between economic activity and inflation or the formulation of monetary policy objectives, without having to draw on in-house expertise. However, since it may be problematic for internationally renowned researchers to commit to serving the interests of policymakers, at least over the long-term, the development of internal expertise is justified if it leads to significant, cutting-edge research capacity that can be mobilised on demand in the interests of the sponsor.

With directed sponsorship partnerships, namely with universities, the Banque de France establishes or enhances exchanges between higher education, research and its own teams, with the aim of harvesting the fruits of improved synergy with bank programmes and policies. Although there is a clear focus on strengthening relations with universities, this is still a sponsorship activity as the sponsor is promoting innovations or advances in knowledge for the public good. There is no private appropriation of knowledge as the increased expertise capacity is founded on the pooling of knowledge and experience between a community of researchers.
This type of sponsorship is particularly appropriate when the bank is working with French universities and contributing to the development of centres of excellence located in France.

These two forms of sponsorship fall respectively within the remits of the Banque de France Foundation, recognised in August 1995 as a public-interest foundation promoting monetary, financial and banking economic research, and of partnerships established with a few academic centres of excellence in 2008.

Since the 2000s, a large proportion of the Foundation’s budget has been used to finance three or four grants per year, selected through calls for tender. This thematic support in the form of funding for projects reviewed in advance by an Evaluation Committee through a competitive process based on merit, possesses all the characteristics of impartial promotion of research, although the themes are more or less guided. In the same spirit, the Foundation awards a thesis prize annually and two prizes for young holders of doctoral degrees from French universities, and provides long-term support to French or European institutions and learned societies considered significant in its field of choice.

Benefits and outlook for sponsorship and research

The themed seminars, each of which is held at head office or at the Autorité de contrôle prudentiel et de résolution (ACPR – Prudential Supervisory and Resolution Authority), which are planned by Chairs, focus on the most prominent papers in the profession, attended by researchers and students, and sometimes followed by a debate inspired by current economic news, are the touchstone of these partnerships. Another hallmark is the tutoring of internal researchers by a renowned mentor, whose role through bilateral meetings is to offer further analysis or insights to the authors of papers in response to editorial comments and peer reviews of international scientific journals. The strength of a partnership can also be measured in the light of its pool of talent; PhD students from the partner who are based at the Banque de France or the bank’s internal researchers who are placed at partner institutions. Such commitments over the long-term provide a link between the parties, revealing the confluence of currents of thought between economic policy and research in the long-term, even if institutional priorities and scientific quality sometimes seem to diverge in the short-term.

Partnerships

The major partnerships signed with the Toulouse School of Economics (2008), the Paris School of Economics (2009), the Fondation nationale de sciences politiques (FNSP – National Foundation of Political Science) (2009) and, more recently, the CREST-HEC Chair under the aegis of the Fondation du risque (FDR – Risk Foundation) (2013) are not just university partnerships of the sort that have always existed, but are real theoretical undertakings entrusted to talented academics and aiming to accompany the Banque de France’s investment in human capital to enhance its expertise and ability to produce research. The dichotomy between these two sponsorship arms is less radical than it might seem. Lectures, invitations and seminars are transversal to the Foundation and partnerships. The Foundation has emphasised its interactive dimension through the periodic organisation of new meetings and lectures and through its exchange program with the research community (Visiting Scholars Program). A meaningful intermediary between the Banque de France and universities because of its rich network of “peers”, including former members of boards, committees, thesis panels, Foundation scholarship holders, visiting researchers and award winners, it continues to play an important role in stimulating increased cooperation with academics.
For their part, partners have also undertaken activities to support projects. For example, the Toulouse School of Economics has instituted two Banque de France-TSE awards for senior and junior researchers in monetary and financial economics. A share of the funds paid to partners through long-term agreements is allocated to subsidising symposiums and other forms of ad-hoc support, as are the recurrent grants from the Foundation to certain research institutions.

It is therefore difficult to estimate how much the Foundation and partnerships have each contributed in return to the development of talent at the bank. From the perspective of the research community, it makes little difference whether lectures, workshops or short stays by visiting scholars are organised by the Foundation or by university partners. Project tenders, the thesis award and the young researcher award on the part of the Foundation, and the series of themed seminars, tutoring, and the Banque de France-TSE awards by the partnership institutions, stand out more as “branded products”. Emulating each other rather than vying for space, the Foundation and its partners through sponsorship partnership agreements offer complementary benefits that can sometimes be substituted for Banque de France sponsorship. The use of partnership agreements does however have different implications in terms of prestige, governance, and risk.

**A key role for the Foundation**

In the opinion of an external observer, the Foundation has indisputably acquired a reputation as a major player in the promotion of research, although this observer’s proximity to the bank somewhat undermines the independence of this supposedly objective view. The mere organisation of patronage events through the Foundation, such as the Joint French Macro Workshop, which is organised for the benefit of young macroeconomists, in collaboration with some of the top French institutions in this field, in itself confers a level of visibility and openness to the action that is less immediate under the aegis of partnerships. However the principle of competition between the best projects, which forms the basis of the international reputation of the Foundation, also limits its capacity to support French research in the manner of foundations such as the NSF in the United States or the ESRC in the United Kingdom, which operate within a national framework.

Less visibility is also sometimes an advantage in terms of cooperation. Brainstorming meetings on research topics, aimed at pre-empting tomorrow’s issues, and bringing together Banque de France directorates and academic partners to look at foreseeable themes of international meetings up to one year in advance, are not intended to serve the image of the bank. Yet they usefully contribute to guiding research programs, to the extent that more insight is expected from a network than a single person.

The governance of the Foundation works differently to that of partnerships: strict but largely open to civil society and public authorities in the case of the Foundation; flexible but taking into account the specificities of each partnership and based on an annual assessment in the case of partnerships. The management of sponsorship at the Banque de France reflects this dichotomy, with three annual meetings held by the Foundation Board and a review of partnerships by the Executive Committee.

The Foundation’s activities are secure in the long term, as its capital is protected, but they are currently affected by adverse market conditions. Partners may also be concerned that, when agreements expire, their budget allocations might not be renewed systematically. While sponsorship management requires regular assessment of the achievement of the goals set by governing bodies, these bodies have recently strongly reaffirmed their commitment to a policy of increased cooperation with academics.
The Foundation is both a symbol and a guarantor of that commitment. A broad project has formed around the Foundation and the partnerships, which are periodically renewed, which is “essential and consistent with the Banque de France’s mission,” as the Governor concluded in his speech at the Foundation’s 20th anniversary celebration.

* * *

As noted in the external evaluation report mentioned in the introduction, the influence held by central banks in the Eurosystem and in the world is increasingly governed by ideas. To assert its influence in Europe and abroad, the Banque de France needs managers within its hierarchy who continue to drive it forward confidently in this area. Yet this strategic priority also implies a requirement for researchers. Researchers are a gateway, opening up lines of investigation. They are the people who overturn old ideas and come up with new ones. Their task is risky, both because it is challenging putting themselves at the forefront of knowledge, and because the results are easy to evaluate through examination of their publications. To paraphrase Nietzsche, if you want to achieve peace of mind and happiness, have faith in management. If you want to be a disciple of truth, then search. The research and sponsorship policy is in place to ensure this.
Financial situation of France’s main listed groups in H1 2015: lower profitability but a forward-looking financial strategy

The 80 largest French industrial and commercial groups listed on segment A of Euronext Paris saw strong turnover growth in H1 2015. The EUR 26 billion rise can nevertheless chiefly be attributed to a EUR 40 billion positive exchange rate effect that offset the sharp decline in organic growth (excluding acquisitions and divestments) of EUR 21 billion.

Operating profit and net income both fell, by 5.5% and 3.6% respectively. This can mainly be ascribed to the unfavourable conditions in the energy and environment sector stemming from the fall in oil prices.

The cash position of the groups under review reached its highest level since 2009, at EUR 162 billion, while the dividends paid remained stable. In contrast to previous years, cash flows were underpinned by operational activities. Moreover, investments rebounded and were directed more towards shoring up production capacity.

To do this, groups resorted massively to leverage. Their financial structure remained sound, their equity increased by 5.7%, partly due to the rise in other comprehensive income (OCI).

Lastly, the market capitalisation of the 80 groups under review reached a historical high of EUR 1,369 billion, mainly owing to ample market liquidity.

Key figures

4.1% rise in turnover
5.9% rise in investment flows
EUR 162 billion cash position at 30 June 2015
EUR 1.369 billion market capitalisation at 30 June 2015

Laurent Carlino
and Anne-Sophie Lafon
Companies Directorate
Companies Observatory

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.

Sharp growth in turnover driven by exchange rate effects

Turnover of the main French groups rose by 4.1%

The consolidated turnover of the 80 largest French companies grew significantly in H1 2015, increasing from EUR 624 billion in H1 2014 to EUR 650 billion in total, or a 4.1% rise (see Chart 1). This was the case for all sectors, except the energy and the environment sector that was affected by unfavourable conditions, and in particular the oil and oil-related industries.

The trend of moving activities into markets further afield continued (see Table 1). For the first time, turnover in Europe fell below the 60% mark, while, at the same time, the shares of “Americas” and “rest of the world” both rose by 1 percentage point. On average, turnover generated in Europe fell by 0.3%, while that achieved in the latter two areas increased by 9.7%.

A particularly strong exchange rate effect

Turnover growth can be broken down into exchange rate effects, consolidation scope effects and organic growth (see Chart 2). Naturally, the groups’ expansion into international markets results in an increased sensitivity to exchange rate fluctuations. The fact that groups convert foreign subsidiaries’ accounts into euro has an impact on their consolidated turnover. In practice, it is purely an accounting effect as it stems from the consolidation method used and the valuation of the flows generated by foreign subsidiaries.

As the share of turnover generated outside Europe now stands at over 40%, exchange rate effects mechanically have an increasing impact on overall turnover calculated in euro. Yet, in contrast to developments in 2014, exchange rate
Financial situation of France’s main listed groups in H1 2015: lower profitability but a forward-looking financial strategy

ENTREPRISES

The main French groups were less profitable

Operating profit fell by 5.5%

Operating profit measures the intrinsic performance of a business, before taking into account financial gains/losses and taxation. For the 80 groups under review, it stood at EUR 52 billion in H1 2015 (see Chart 3), or a decline of EUR 3 billion compared with H1 2014 (–6%). A sectoral analysis shows that the poor performance of the energy and environment sector also affected this profit for the sample as a whole. Accordingly, its operating profit decreased from EUR 20 billion to EUR 14 billion. This can mainly be attributed to the lower turnover, which mechanically affects operating income, as well as to significant write-downs by some groups.

The strong increase in turnover therefore masks a more complex picture: most of this rise can be attributed to the particularly large exchange rate effects and the decline in organic growth.

Organic growth (i.e. excluding acquisitions and divestments) was significantly negative, falling by EUR 21 billion, and contributing –3.2 percentage points of growth. However, this result must be considered with caution as the overall decline was due to a leading group in the energy and environment sector that performed badly in H1. Stripping out this group, organic growth of the rest of the other firms as a whole was up slightly by EUR 2 billion.

The structure of the large groups under review is not rigid and changes regularly as they acquire or divest subsidiaries. As a result, half-yearly turnover incorporates the effects of changes in consolidation scope, reflecting the net contribution of entities entering the scope and those exiting it during the year. Most groups report these changes in consolidation or provide enough elements to make it possible to assess this phenomenon. In H1 2015, the consolidation scope effect was positive, adding 1.8 percentage point to turnover growth, or EUR 11 billion. This increase can mainly be explained by a very large deal in the information and communications sector.

The strong increase in turnover therefore masks a more complex picture: most of this rise can be attributed to the particularly large exchange rate effects and the decline in organic growth.
Net income decreased by 3.3%

In the first half of 2015 net income reflected a slight deterioration in the main groups’ net profitability. Net income is calculated by incorporating financial income, income from discontinued business and tax expenses into operating income. Net profitability contracted by 3.3%, falling from EUR 33 billion to EUR 32 billion (see Chart 4). This decline was mainly observed in the manufacturing industry and the energy and environment sector.

The fall in operating income affected net income, even though the decline in the latter was more contained. While the average net profit margin (ratio of net income to turnover) rebounded sharply in H1 2014 compared with 2013, it contracted from 5.3% in 2014 to 5% in 2015 (see Chart 5). However, the median net margin ratio rose to stand at 5%, against 4.6% in H1 2014. The decrease in the average net margin ratio can thus be ascribed to the fall in groups’ margin rate at both ends of the distribution.

C4 Net income by sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>1st half 2009</th>
<th>1st half 2010</th>
<th>1st half 2011</th>
<th>1st half 2012</th>
<th>1st half 2013</th>
<th>1st half 2014</th>
<th>1st half 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy and environment</td>
<td>23</td>
<td>13</td>
<td>37</td>
<td>14</td>
<td>12</td>
<td>38</td>
<td>32</td>
</tr>
<tr>
<td>Information and communication</td>
<td>5</td>
<td>6</td>
<td>17</td>
<td>6</td>
<td>4</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>Real estate services and activities</td>
<td>14</td>
<td>17</td>
<td>17</td>
<td>16</td>
<td>5</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Trade, transport, hotel and catering</td>
<td>6</td>
<td>1</td>
<td>-1</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Manufacturing and construction</td>
<td>12</td>
<td>10</td>
<td>11</td>
<td>10</td>
<td>4</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Manufacturing and construction</td>
<td>32</td>
<td>33</td>
<td>30</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>32</td>
</tr>
</tbody>
</table>

Source: Financial statements of the 80 main groups; July-August 2015. Banque de France calculations – September 2015.

C5 Net margin rate (net income/turnover)

<table>
<thead>
<tr>
<th>Sector</th>
<th>1st half 2009</th>
<th>1st half 2010</th>
<th>1st half 2011</th>
<th>1st half 2012</th>
<th>1st half 2013</th>
<th>1st half 2014</th>
<th>1st half 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy and environment</td>
<td>9.2</td>
<td>6.6</td>
<td>6.4</td>
<td>6.2</td>
<td>5.2</td>
<td>5.3</td>
<td>5.0</td>
</tr>
<tr>
<td>Information and communication</td>
<td>11.0</td>
<td>6.6</td>
<td>6.9</td>
<td>4.9</td>
<td>4.7</td>
<td>4.6</td>
<td>5.0</td>
</tr>
<tr>
<td>Real estate services and activities</td>
<td>10.7</td>
<td>3.2</td>
<td>3.2</td>
<td>2.4</td>
<td>2.6</td>
<td>2.4</td>
<td>1.2</td>
</tr>
<tr>
<td>Trade, transport, hotel and catering</td>
<td>9.2</td>
<td>5.3</td>
<td>4.5</td>
<td>4.7</td>
<td>5.0</td>
<td>5.3</td>
<td>5.0</td>
</tr>
<tr>
<td>Manufacturing and construction</td>
<td>9.4</td>
<td>4.6</td>
<td>4.5</td>
<td>4.7</td>
<td>5.3</td>
<td>5.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Manufacturing and construction</td>
<td>9.6</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Source: Financial statements of the 80 main groups; July-August 2015. Banque de France calculations – September 2015.
Groups’ cash position strengthened further and investment recovered

The cash position reached a new record high

At the end of June 2015, the main French groups had a total cash position of EUR 162 billion, which is the highest level since 2009 for a half-year end (see Chart 6). This represents a rise of 8% in one year, or EUR 12 billion. These dynamics were clearly driven by the energy and environment sector and by the information and communication sector.

In addition to the trend increase observed since 2009, the sharp rise this year can partly be ascribed to disposals by one major information and communication group, leading to a EUR 7 billion increase in its cash position. This, in itself, accounts for 70% of the rise. Furthermore, another group preparing to make an acquisition took the corresponding amount (EUR 5 billion) to its cash position.

This operation did not affect the dividend payment policy which remained stable, with EUR 30 billion paid at 30 June 2015. The reference documents nevertheless show that dividend payments from 2014 income as the main drain on the groups’ cash position in H1 2015.

Cash flows underpinned by operational activities

In order to analyse more closely changes in the cash position of the main groups in H1 2015, it is useful to examine the structure of cash flows. They can relate to three distinct areas: operating activities, investment operations and financing activities.

With total cash flows of EUR –17 billion, the profile of H1 2015 differs from that of previous years (see Chart 7). Whereas, previously, negative cash flows were accompanied by a reduction in positive flows related to operational activities, in 2015 these flows were in fact higher than in 2014 and returned to their levels of 2009-2010. But this rise was offset by higher negative flows related to financing activities.
of 2015, these outflows increased significantly to stand at EUR –13.5 billion, compared to EUR –2.7 billion a year earlier.

### Investment

In the groups’ financial statements, investment flows are divided into five different categories: acquisition of tangible and intangible fixed assets, acquisition of financial fixed assets, disposals of tangible and intangible fixed assets, disposals of financial fixed assets and “other changes”.1

In the first half of 2015, these flows totalled EUR 54 billion, or the highest amount in the period under review (see Chart 8). Up by almost EUR 3 billion overall, this rise affected all sectors with the notable exception of the energy and environmental sector that, as explained above, had to contend with a difficult economic environment.

### Operating cash flows

According to the standard definition used in financial analysis, operating cash flows correspond to the difference between a company’s internal financing capacity and the changes in its operating working capital requirement (OWCR) over a given period. Whereas these flows decreased in 2010, they rebounded strongly in the first half of 2015 from EUR 39 billion to EUR 58 billion.

At the same time, OWCR declined sharply in 2015 (down EUR –49 billion on 2014) and contributed to the improvement in the cash position. More specifically, this is due to a contraction in accounts receivable (owing to the more rapid payment times), an increase in accounts payable (which are thus paid later) and a rise in inventories.

### Financing flows

Flows related to financing activities primarily include equity transactions (dividend payments, share issues and buybacks) and financial debt (debt issues, repayments). In the first six months
Financial situation of France’s main listed groups in H1 2015: lower profitability but a forward-looking financial strategy

The breakdown of investment flows shows that groups are more concerned about their production capacity. Acquisitions of tangible and intangible fixed assets increased to levels close to those of 2012, and even exceeded them for acquisitions of financial fixed assets (see Chart 9). At the same time, the main groups reduced their tangible and financial fixed assets. This recovery in investment therefore appears to reflect a more proactive policy. The groups have emerged from their wait-and-see stance.

Debt and equity increased

Debt reached a record high in the first half of 2015

After falling since 2012, the bank debt of the main French groups rose in H1 2015. Overall, between 30 June 2014 and 30 June 2015, total outstanding financial debt grew from EUR 521 to 540 billion, or by 3.5% (see Chart 10). This is particularly notable in the energy and environment sector and in the information and communication sector. There are a number of possible explanations for this rise in bank debt. On the one hand, it may be related to the rise in investment flows, which amounted to EUR 8 billion, and which were mainly financed by debt. On the other hand, a very large deal in the information and communications sector, solely financed by bank debt (EUR 14 billion) and borne by the acquired undertaking, explains part of this growth.
Equity rose very strongly

The equity levels of the groups under review increased very significantly between H1 2014 and H1 2015 to stand at EUR 657 billion, up 5.7% (see Chart 11). This increase was particularly pronounced in the information and communications sector (EUR 17 billion) and in the manufacturing industry (EUR 10 billion). In the latter sector, this rise can be solely attributed to a major buyout, adding EUR 7 billion to equity. Equity rose faster than financial debt, which led to a decline in the average financial debt (excluding bonds) to equity ratio, to stand at 77%.

This rise in equity can largely be attributed to other comprehensive income (OCI). The latter stood at EUR 19 billion in H1 2015 (see Chart 12). Levels of OCI depend on highly volatile exogenous factors such as exchange rates or hedging strategies for operational risks. The high volatility of these variables leads to significant differences when switching between half-year analysis and full-year analysis. The significant increase in OCI mainly stems from foreign currency translation adjustments that stood at EUR 14 billion as well as actuarial adjustments that amounted to EUR 4 billion.

The positive impact of OCI allowed the main 80 groups to maintain a high equity-to-asset ratio (fixed assets + WCR). At the end of 2015, this ratio reached 32.4%, which is slightly down on 2014, while half of the groups in the sample had an equity ratio of 40% or above.

Also, European financial markets performed extremely well in H1 2015. This strong performance was chiefly attributable to the fall in oil prices and the ample liquidity conditions resulting from the ECB’s quantitative easing programme implemented during that period. Yet, this excess liquidity impacted the stock market capitalisations of the groups under review and drove them to the record level of EUR 1,369 billion at 30 June 2015.

All in all, by increasing leverage, raising equity and especially upping their investments, the main French groups appear to be preparing for an expansion in economic activity.
Appendix

Methodology

The study covers non-financial groups listed on the Paris financial market, having published their half-yearly accounts at 30 June 2015 and belonging to segment A of Euronext (capitalisation above EUR 1 billion). Moreover, these firms must have observed this criterion for at least two financial years. The sample contains 80 groups.

The consolidated half-yearly accounts from 2009 to 2015 are taken into account and the groups are broken down into the following sectors (see Table).

The sample does not take account of the following groups:

- **Groups whose majority shareholders are not French or only generating a negligible proportion of their turnover in France**: ArcelorMittal, Schlumberger, STMicroelectronics ;

- **Financial institutions and similar entities**: AXA, BNP Paribas, CIC, CNP, Coface, Crédit Agricole, Euler Hermès, Eurazéo, Euronext, Natixis, Scor SE, Société Générale;

- **Groups with financial years not ending 31 December**: Alstom, Elior, 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, Unibail-Rodamco;

- **Groups already within the scope of another group or investment fund**: Artois Nom., Burelle, Cambodge Nom., Casino Guichard, Christian Dior, Colas, Faurecia, FFP, Financière de l’Odet, Havas (from 2013 onwards), Paris-Orléans, TF1, Worldline.

Groups taken into account

<table>
<thead>
<tr>
<th>Energy and environment</th>
<th>Areva, EDF, Engie (ex-GDF-Suez), Maurel &amp; Prom, Suez Environnement, Total, Veolia Environnement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade, transport, hotels and catering</td>
<td>Accor, ADF, Air France-KLM, Bolloré, Carrefour, CFAO, Eiffage, Eurotunnel, Kering, Orpea, Rallye, Rexel, Rubis</td>
</tr>
<tr>
<td>Information and communication</td>
<td>Atos, Capgemini, Dassault Systèmes, Gemalto, Iliad, Ipsos, Lagardère, Métropole TV, Numericable-SFR, Orange, Technicolor, Vivendi</td>
</tr>
<tr>
<td>Real estate services and activities</td>
<td>Bourbon, Bureau Veritas, Edenred, Havas *, JCDecaux, Nexity, Publicis, Technip, Téléperformance</td>
</tr>
</tbody>
</table>

* Havas, included in our sample from 2009 to 2012, was consolidated into the Bolloré group in 2013.
Data analysed

The main accounting items analysed for the 80 groups in the 2015 sample are as follows:

- **General Information**: Name of the entity, SIREN business identification number, NACE code of group’s main activity;

- **Income statement**: Turnover, o/w turnover in France, o/w turnover by geographical area (Europe, Americas, rest of the world), operating income, current operating income, net income;

- **Comprehensive income**: Foreign currency translation adjustments, available-for-sale financial assets, cash flow hedges, changes in revaluation surplus, actuarial gains and losses, affiliates’ earnings and losses booked directly as equity, others, comprehensive income;

- **Balance sheet**: Other intangible assets, tangible assets, inventories, trade receivables, total assets (current and non-current), total financial debt, o/w bond debt, minority interests, equity, trade payables, total liabilities (current and non-current);

- **Change in equity**: Change in equity capital, dividends paid (group share + minority), foreign currency translation adjustments, financial instrument valuation adjustments, revaluation of other assets, actuarial losses and gains, firm’s equity;

- **Cash flows**: Cash flow from operational activities, cash flow from investment activities: acquisition of tangible and intangible fixed assets, acquisitions of financial fixed assets, disposals of tangible and intangible fixed assets, disposals of financial fixed assets; other(s) change(s); cash flow from financing activities, change in net cash position, net cash position at account closing, stock market capitalisation at 30 June 2015.
Published articles

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
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: falling 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

Summer 2014

Monetary and credit developments in 2013
Major French groups were less profitable in 2013, but their cash position was stable and their financial structure strong
Labour productivity in Europe: allocative efficiency of labour or performance of firms?
How do house prices affect wages? A comparison between France and Germany
Euro banknotes and coins in France in 2013

Autumn 2014

The Banque de France company rating system: a tool to facilitate companies' access to bank credit
The decline in profitability has affected the investment of SMEs
Non-resident holdings of shares in French CAC 40 companies at end-2013
Is the rise in student loan debt in the United States a source of economic fragility?
Four instruments to strengthen financial integration in sub-Saharan Africa
Summary of the conference of 27 May “Promoting financial integration in Africa”
**Winter 2014-2015**

New housing loans to households: trends up to mid-2014  
Change in French households’ financial investment flows between June 2013 and June 2014 and the impact on bancassurance groups  
Financial situation of France’s major listed groups in H1 2014: a combination of prudence and deleveraging  
The performance of French firms in 2013: supported by large enterprises, profitability recovered  
The euro area Beveridge curve in the post-crisis period: increase in structural unemployment since 2010  
US labour market and monetary policy: current debates and challenges

**Spring 2015**

Monetary and credit developments in 2014  
The financial position and funding of French non-financial corporations  
The state of corporate finances: Summary of the symposium held by the Banque de France on 21 November 2014  
Overvaluation in the housing market and returns on residential real estate in the euro area: insights from data in euro per square metre  
Preparing France’s balance of payments in accordance with the new international standards: a statistical response to economic globalisation

**Summer 2015**

France’s major listed groups continued to consolidate their finances and posted improved profitability in 2014  
International macroeconomic impacts of structural reforms  
Labour markets: institutions and reforms Summary of the third Labour Market Conference held in Aix-en-Provence on 4 and 5 December 2014 by the Aix-Marseille School of Economics and the Banque de France

**Winter 2015-2016**

Consumer credit: recent trends and profile of borrowers  
The 20th anniversary of the Banque de France Foundation for research in monetary, financial and banking economics  
The Banque de France, research and patronage  
Financial situation of France’s main listed groups in H1 2015: lower profitability but a forward-looking financial strategy
Other publications available in english

Freely downloadable from the Banque de France’s English website

Annual Report
Financial Stability Review
Quarterly Selection of Articles
Research Newsletter
Seminars and symposiums
Working paper series
Occasional papers
Documents and Debates
Focus
Free downloads

Printed versions available from:

Direction de la Communication
07-1397 Service de la Documentation et des Relations avec le public
9 rue du Colonel Driant, 75049 Paris Cedex 01
Telephone: + 33 (0) 1 42 92 39 08 – Fax: + 33 (0) 1 42 92 39 40

For:

Financial Stability Review
– OTC derivatives: new rules, new actors, new risks (April 2013)
– Macroprudential policies: implementation and interactions (April 2014)
– Financing the economy: new avenues for growth (April 2015)

Banque de France 2014 Annual Report

The French balance of payments and international investment position – Annual Report 2014

The Observatory for Payment Card Security – Annual Report 2014

Breakdown of the use of non-cash payment instruments – 2014
Report on the oversight of payment instruments and financial market infrastructures – 2014

Economic projections 2015

Focus
Potential growth: a crucial but complex concept (March 2015)
French households channelled more savings into regulated products than market-based investments (July 2015)
Market liquidity myth and reality (December 2015)

Rue de la Banque
https://www.banque-france.fr/publications/documents-economiques/rue-de-labanque.html
Land prices, lending to companies and job creations (November 2015)
Euro area external adjustment and real exchange rate movements: the role of firm productivity distribution (December 2015)
Monetary policy without interest rates. The French experience with quantitative controls (1948 to 1973) (January 2016)
Trade, wages, and collective bargaining (January 2016)