CIPA
INTERBANK CONVENTION
ON AUTOMATION

ABI
ITALIAN BANKING
ASSOCIATION

SURVEY ON THE USE OF IT IN EUROPEAN BANKING GROUPS WITH INTERNATIONAL RAMIFICATIONS

Rome, October 2010

CONTENTS

Introduction

Each year the Interbank Convention on Automation (CIPA) – established in 1968 at the initiative of the Bank of Italy and the Italian Banking Association (ABI) – carries out, jointly with ABI, a "Survey on the State of Automation in the Banking System", covering a broad sample of banks and banking groups.

The aim of the survey is to provide an overview of the use of IT in the Italian banking system. In particular, attention is paid to the organizational and governance aspects, the sourcing choices, the use of technologies – as regards both the ways of contacting customers and the internal administrative processes – and the defenses adopted to curb and control IT risk. Special attention is paid to the economic aspects. In fact indicators are calculated that relate IT costs to the main operational and income statement aggregates and to indices of the composition of costs.

The growing international scope of the main Italian groups and the increasingly widespread presence in Italy of leading foreign banks have created a need for comparison no longer limited to the national scale. Born as a "thematic analysis" of the survey of Italian groups, of which it takes over themes and observation criteria, the content of the "Survey on the use of IT in European banking groups with international ramifications" has been enriched year by year and in 2008 became an autonomous publication.

As for the national Survey, the results are set out in a document published on the CIPA and ABI websites (www.cipa.it and www.abi.it). Each group that participates in the "international" survey receives feedback containing its indices, compared with the average indices of the peer group.

As previously, the involvement of foreign groups in the 2009 Survey was achieved both via banks belonging to CIPA with a foreign parent company and via branches located in Italy, with the organizational support of the Milan branch of the Bank of Italy.

The members of the CIPA working group, coordinated by Isabella Vicari (Bank of Italy − CIPA Secretariat) and Romano Stasi (ABI), were: Paola Mostacci, Pier Luigi Polentini, Ernesto Ferrari, Daniela D'Amicis and Francesco Cavallo (Bank of Italy − CIPA Secretariat), Silvia Attanasio (ABI), Claudio Paglia and Antonio Melina (Intesa Sanpaolo), Sebastiano Vita (Unicredit Group), Francesca Mastella and Carlo Calmasini (SGS - Banco Popolare), Marco Bruzzesi and Marco Coda (Banca Sella), Lucia Pastore (Veneto Banca Holding), Christian Altomare (Deutsche Bank –Deutsche Bank AG Group), Carlo Cotroneo (Banca Nazionale del Lavoro - BNP Paribas Group), Paolo Zacco (Cariparma – Crédit Agricole Group), Pasquale Tedesco (Dexia Crediop –Dexia Credit Local SA Group).

The following also participated in the works as representatives of their banking groups: Simone Dominioni (Barclays Bank plc), Valeria Crivelli (Banco Bilbao Vizcaya Argentaria), Franco Perini (Credit Suisse), Kristian Braun (Commerzbank AG), Dario Caprioli (ING Direct NV), Umberto Ortelli (Rabobank), Paolo Oliva (The Royal Bank of Scotland), Luigi Chirolli (Banco Santander) and Theresa Mahoney (UBS AG), to whom go our sincere thanks for their valuable contribution.

Summary of the results

The European setting in which the Italian banking system operates calls for a continuous comparison with foreign groups as regards operating procedures, size, the location of organizational structures, the level and type of IT.

In this context the "Survey on the use of IT in European banking groups with international ramifications" (taking as a starting point the traditional Survey of Italian groups, with reference exclusively to national banking activity) has the objective of providing the Italian groups operating on an international scale with some comments serving to assess their position in IT matters in comparison with the corresponding European groups that also operate in Italy. At the same time it offers the foreign groups useful yardsticks for the purpose of comparison.

Almost all the eighteen groups participating in the 2009 Survey, five with an Italian parent company and thirteen with a foreign one, engage in retail banking, corporate and investment banking and private banking, albeit with different percentage breakdowns. The Italian groups operate primarily in the retail banking sector, while the foreign groups operate even in the private and corporate and investment banking sectors. Moreover, more than 50% of the foreign groups declare that they engage in other activities (in addition to those of a more strictly banking nature), accounting for between 2% and 20% of their total business and ranging from leasing to factoring, from insurance to consumer finance, and from real estate to wealth management.

This variety obviously influences the operational solutions adopted by each group and, consequently, the choices made in the field of IT and the related costs. This needs to be taken into account when assessing the results of this Survey.

Examining the sample of groups, on the basis of the classification by the parent company's nationality, shows that both the banks and the IT structures of the foreign groups are more concentrated in Central Europe, Asia and the rest of the world, while those of the Italian groups are more present in the Mediterranean and Eastern Europe.

The IT structures of the foreign groups are almost entirely (92%) located at a group bank, while those of the Italian groups are mainly (80%) located at a group non-bank or a non-group company. The organizational model of "IT factory" adopted by 60% of the Italian groups is the centralized one, with the foreign groups mainly opting for centralized structures with some competence centers or for various forms of decentralization.

Monitoring the consolidation and rationalization of IT infrastructures shows that, for a percentage ranging from 40% to 60% of both Italian and foreign groups, integration of data centers and server farms is still under way, as against 20%-40% of groups that have already completed their interventions in this field. The foreign groups are further ahead in the process of unifying their telecommunications networks.

As regards the action taken to assess the IT services supplied, more than 83% of the sample groups were found to carry out customer satisfaction surveys, in most cases on a periodic basis. The functional adequacy of the applications and the compliance with the time-to-market requirements are factors considered by all the Italian groups, while the foreign groups pay greater attention to the aspects involved in business continuity. For both Italian and foreign groups the promptness of interventions to deal with reported problems is a decisive factor in measuring user satisfaction.

An important part of the survey on European banking groups is devoted to the economic aspects of the use of IT. As regards the related costs in the period 2008-2009, with reference to a sample of 13 groups (5 Italian and 8 foreign), a slightly downward trend of −1.5% emerged. Disaggregating the data by the nationality of the parent company, a pronounced difference was found between the foreign groups, which reported a basically stable situation (with a small increase of 0.2%), and the Italian groups, which confirmed a clear decline (−6.4%), in line with the results already obtained with the national Survey. The reduction was partly due to the optimization and rationalization measures consequent on the completion of integration processes.

As regards the forecast data for 2010, based on a sample of 15 groups (5 Italian and 10 foreign), overall there was an increase of 5.3%. The breakdown by nationality of the parent company shows that this result was powerfully influenced by the growth forecast by the foreign groups (+7.2%), while the Italian groups forecast a further decline, albeit modest (−0.9%).

It is important to note that the results described above are closely related to the characteristics of the individual banking groups present in the small survey sample, with reference to corporate structure, operations and related organizational models, and the size and geographical distribution of the groups' management and business structures. It follows that the data presented are merely indicative of a tendency and that the individual values shown cannot be taken as applying to the entire banking system without the necessary adjustments.

The largest shares of IT expenditure are on services received from third parties (29%) and group personnel (28%), followed by spending on software (20%) and hardware (14%). Analyzing the data with reference to the nationality of the parent company, for the foreign groups the largest share is expenditure on group personnel (32%), which is consistent with the insourcing model prevalently adopted for the management of IT services, while for the Italian groups the largest share is expenditure on "services received from third parties" (36%), which is consistent with the major recourse made to outsourcing.

The operations area, which includes the main banking activities, absorbs more than 50% of the total costs, while the remaining amounts are divided between support services (20%), marketing (18%) and management (12%).

The survey also confirmed the results of the previous one regarding the division between run-the-business and change-the-business expenditure, with the former outweighing the latter by more than two to one. In both cases the percentage of business-related costs was about twice that of support functions.

The analysis of IT expenditure ends with the comparison of the technological choices and the policies, on the basis of investment, for innovation. Substantial differences were found when the nationality of the parent company was considered: the Italian groups declared an average 2009 cash-out percentage of 4% for investment in innovative technology, compared with the foreign groups' 16%.

The same pattern emerged from the forecast data: the commitment to invest in technological innovation was forecast to increase by three quarters of the foreign groups (25% forecast that it would be stable) and only by 40% of the Italian groups (60% forecast that it would be stable).

The technological fields in which investment was concentrated were VoIP, business intelligence, virtualization and green IT, used mainly for internal needs. A good deal of planned investment is aimed instead at customer services and mainly concern WEB 2.0, mobile, business intelligence and contactless technologies. Cloud computing was of interest, for internal functions and customer services.

The policies for the development of the channels for contact with customers are powerfully influenced by the type of activity of the group. With reference to the entire sample, the channels found to show the greatest growth are: internet banking (100%), mobile banking (89%) and ATM-self service (67%), while the following are mainly stable: call centers (50%, compared with 39% that consider it to be growing) and counters (41%), with the same percentage of the sample declaring this item to be declining.

The breakdown by nationality of the parent company shows that while the foreign groups appear to be aligned with the entire sample, the Italian groups diverge in part from the overall performance, especially as regards ATM-self service, deemed to be growing by 100% of the groups, and call centers, estimated to be declining by 40% of the groups. This different assessment can be attributed in part to the different operational characteristics of the Italian groups with respect to the foreign ones.

To tackle the risks connected with the use of IT channels, with special reference to identity theft, the banking groups, regardless of the nationality of the parent company, are careful to disseminate behavioral rules among their customers by publishing notices on their Internet portals and websites. In addition, all the Italian groups and the majority of foreign groups are planning to introduce specific guidelines aimed at those of their customers that operate via the Internet.

In addition to these initiatives, nearly every group adopted specific internal countermeasures of an organizational and security policy nature and also provided for permanent organizational structures for the purpose. Among the security measures, there was the widespread adoption of strong customer authentication techniques, encoded procedures in response to IT fraud, and mechanisms for controlling customer transactions aimed at the early discovery of fraud. Widespread recourse has also been made to forms of collaboration with law enforcement authorities aimed at preventing/repressing fraud, and to training courses for call centers staff providing customer support.

Techniques (such as the periodic scanning of the Web and log analysis) serving to identify fraud, such as the simulation of the group's Internet site, are used by about 80% of the groups in the sample.

To complete the analysis of the economic aspects, it was found that IT costs averaged 0.17% of total assets, 12.2% of operating costs and 8.1% of gross income, with a fairly wide range between the lowest and highest values (especially in the two latter cases), owing above all to the differences between the nationality, size and operations of the groups in the sample.

RESULTS OF THE SURVEY

Eighteen groups participated in the 2009 "international" Survey, five Italian groups and thirteen foreign ones. The sample of foreign groups showed some changes with respect to the 2008 Survey, while the sample of Italian groups was unchanged (see the Methodological Note).

Of the thirteen groups with a foreign parent company that responded to the questionnaire, eleven are among the top thirty European banking groups by total assets in 2009.[1] If the Italian groups are also considered, the number of sample groups in the top thirty rises to thirteen, as in the previous survey.

The information gathered covers the organizational and governance aspects of the IT functions, the economic aspects and the policies governing the choice of technological innovation.

1. Organizational aspects

1.1 Types of groups and geographical distribution

In view of the presence of very different situations within the sample, as regards both the range of operations and geographical distribution, it was deemed advisable to start by collecting information on the groups' operational profiles and the geographical distribution of their member banks and IT structures.

This made it possible to identify the market segments in which each group has established its activity, the distribution and number of structures for contact with customers and the location and number of technical IT structures providing support to the groups' operations.

	Number of Groups	Retail banking	Corporate/ Investment banking	Private banking	Other
Groups with Italian parent company	5	5	4	3	1
Groups with foreign parent company	13	12	12	10	9
Entire sample	18	17	16	13	10

It was found, independently of the nationality of the parent company, that nearly all the groups engaged in retail, corporate/investment and private banking, but with different percentage breakdowns. The Italian groups were found to be more involved in retail banking than the foreign groups (73% as against 44%) and less involved in corporate/investment and private banking. In general the operations of the foreign groups were more widely diversified among the various market segments (*Figure 1*).

[1] Consideration was given to banking groups with their head office in a euro-area country, the United Kingdom or Switzerland.

Ten of the groups in the sample – nearly all with a foreign parent company – declared that they engaged in other activities, with percentages ranging from 2 to 20%.[2]

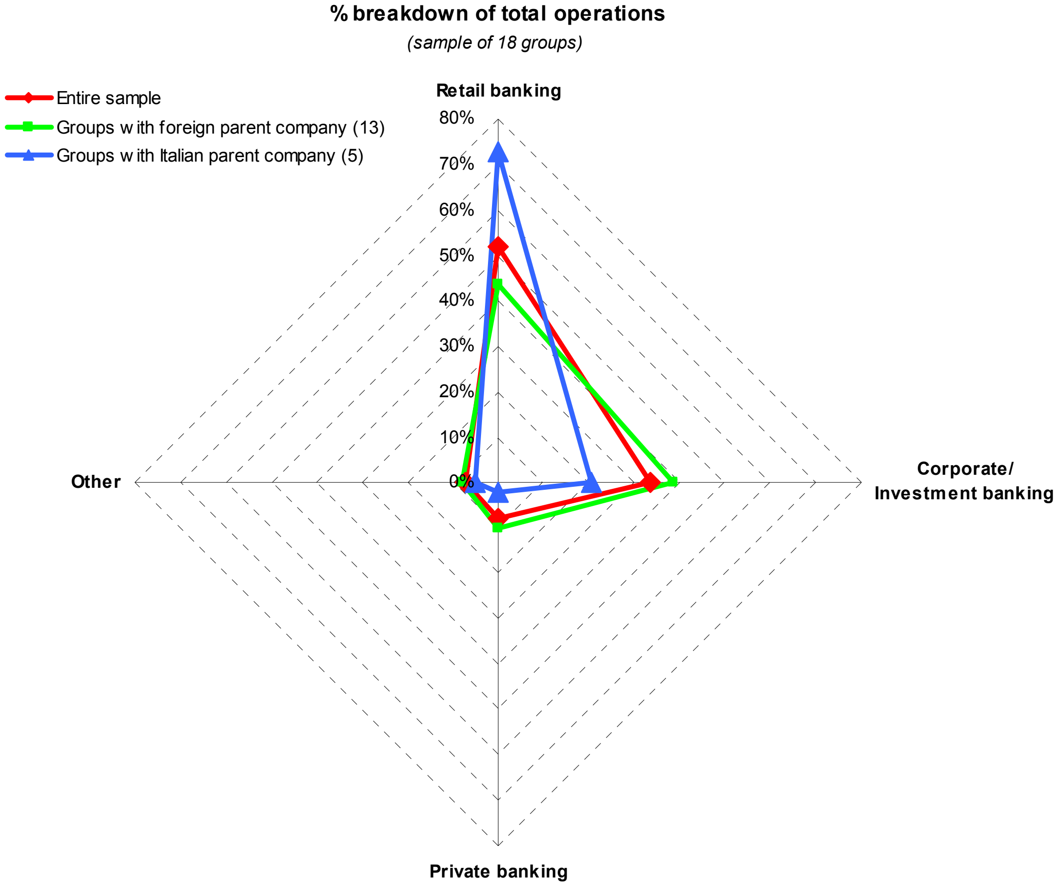

Figure 1

As regards the geographical location of the banks in the groups, the majority (more than 56%) were obviously located in Europe, 23% were divided between Asia and America, while the remaining 21% were located elsewhere (*Figure 2*).

[2] The most significant of these other activities were: asset management, real estate, leasing, factoring, insurance, consumer finance and wealth management.

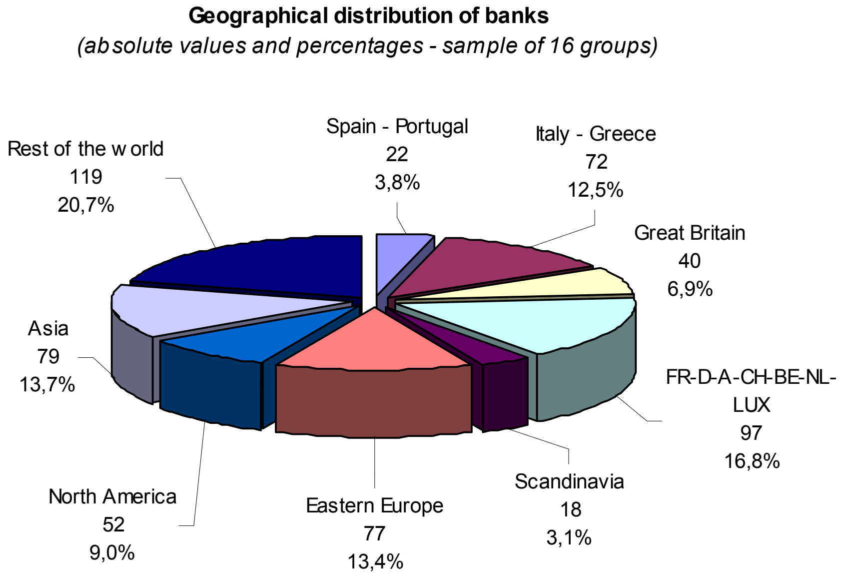

Figure 2

The predominant locations of the banks of the Italian groups continued to be the Mediterranean area and Eastern Europe, in both absolute and percentage terms. The foreign groups, by contrast, showed a more diversified breakdown, with their banks distributed in a fairly uniform manner in the different geographical areas, with a significant presence not only in Central Europe but also in Asia and the rest of the world (*Figure 3* and *Figure 4*). This appears to be in line with the foreign groups' operations, which were more uniformly spread among the various market segments.

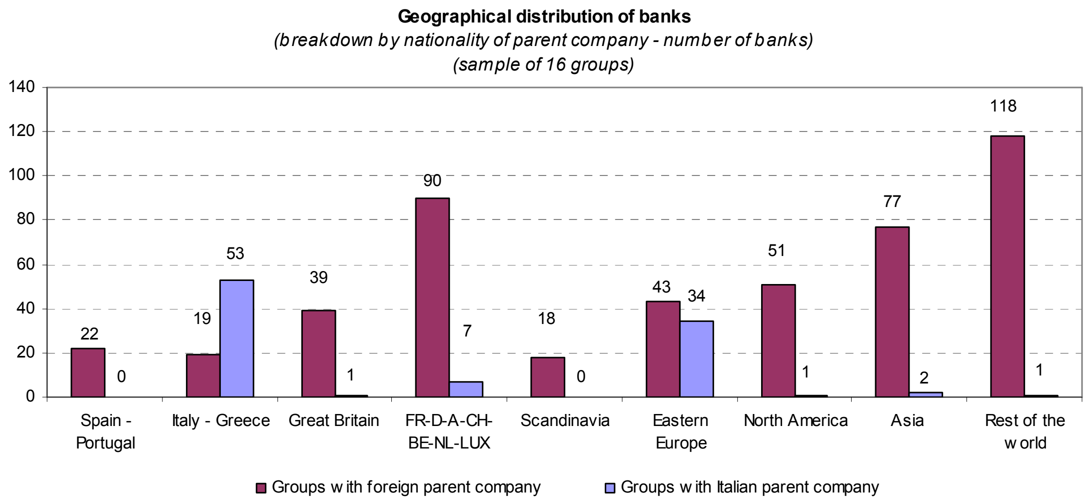

Figure 3

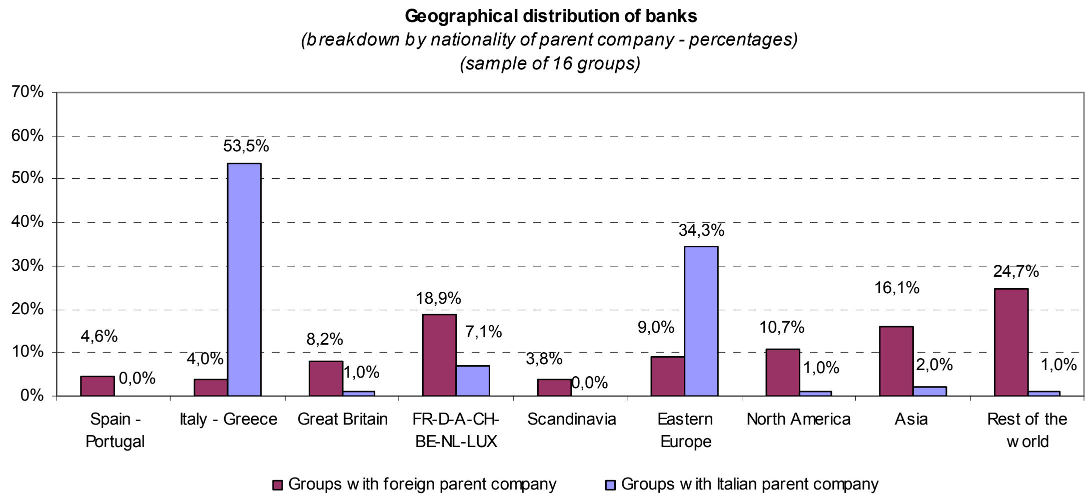

Figure 4

Broadly speaking, the geographical distribution of IT structures followed that of the business structures. It appears linked to the market segments of interest to the groups, their more or less consolidated international presence and their size. Naturally, it is also influenced by factors of an economic nature.

There is a prevalence of sites in Europe (62%), as against 38% of IT structures located in Asia, North America and the rest of the world (*Figure 5*).

Bearing in mind that the two samples analyzed are not equivalent, it is worth noting the significant shift, in numerical terms, between the distribution of the banks and that of IT structures in the Italy-Greece and rest of the world zones (*Figure 2* and *Figure 5*).

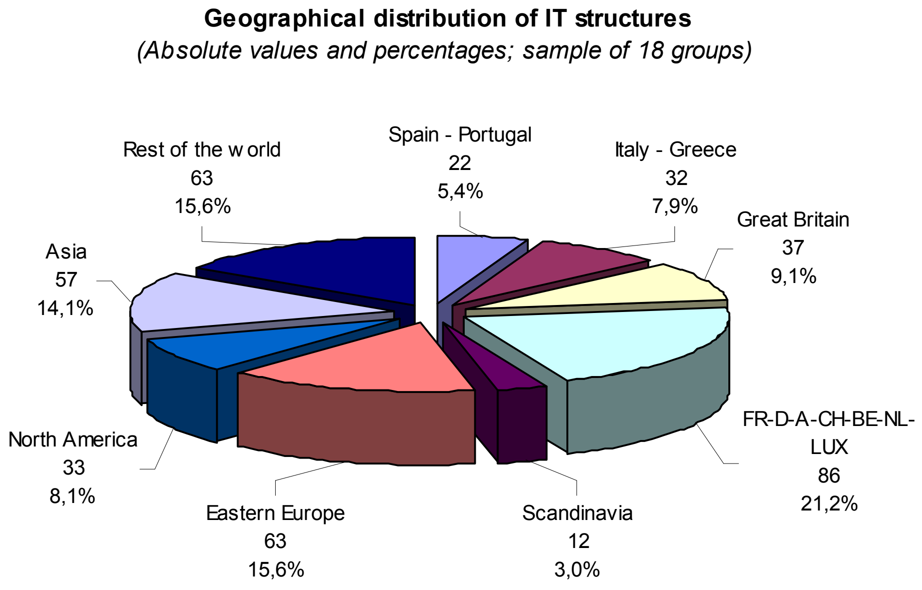

Figure 5

Again with reference to IT structures, it should be noted that the foreign groups showed a fairly homogeneous distribution in the various geographical areas, with a degree of concentration in Central Europe and, to a lesser extent, in Asia and the rest of the world. In the Italian groups the pronounced concentration in Eastern Europe was confirmed (*Figure 6* and *Figure 7*).

The location and number of IT structures in the various geographical areas were also influenced by the, more or less distributed, model of "IT factory" adopted by the sample groups; as shown below in Section 1.2, the foreign groups showed greater recourse to forms of decentralization.

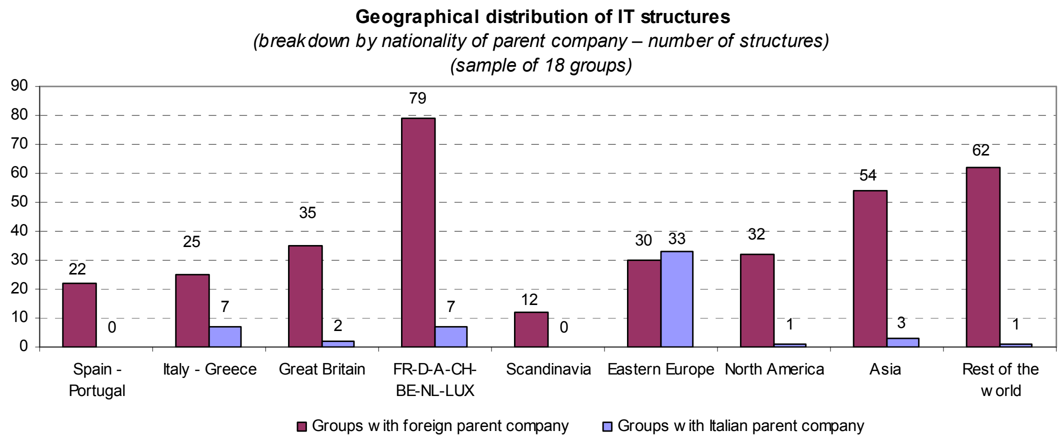

Figure 6

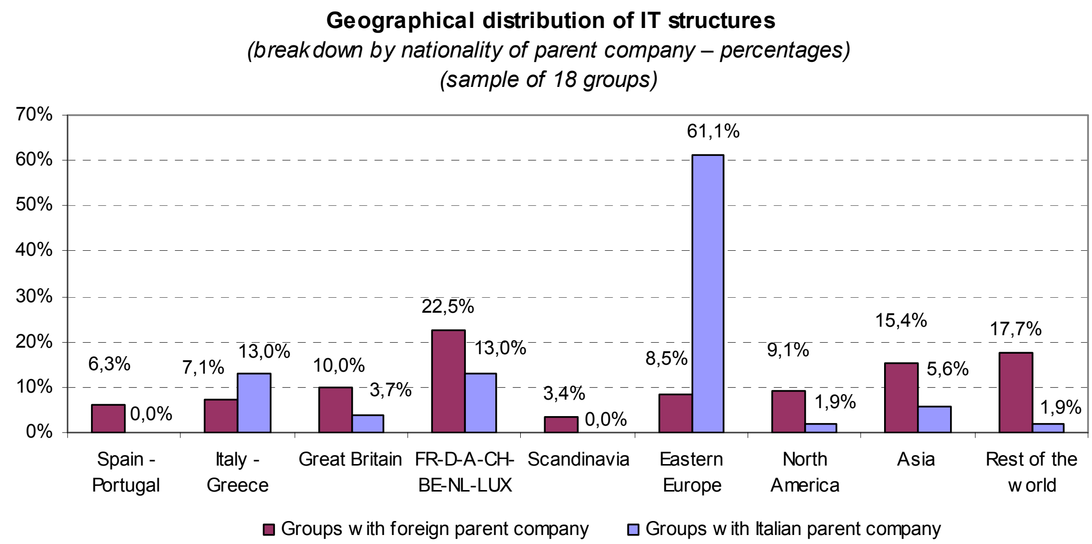

Figure 7

1.2 IT governance structure and organizational model

All the groups, except for one foreign group, declared that they had a central IT governance structure, which for the majority of groups (58%), reported in equal proportions to the Chief Executive Officer or the Chief Operational Officer (*Figure 8*).[3]

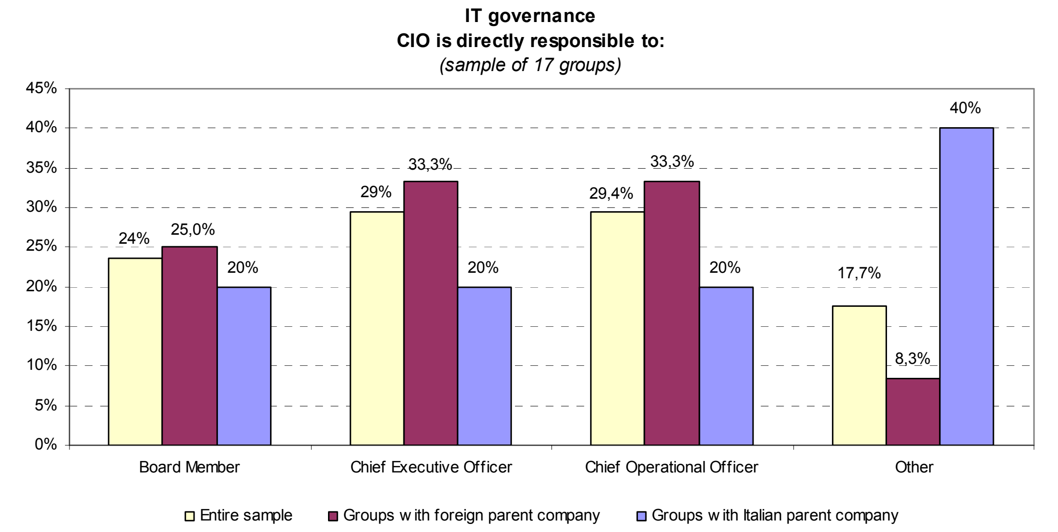

Figure 8

As for the manner of managing the IT system, the survey showed that nearly three quarters of the groups making up the sample concentrated their IT structures at a group bank. Considering the nationality of the parent company, it was found that the manner of managing the IT system varied across the sample: while the great majority of foreign groups (92%) entrusted the management of the data processing system to a group bank, 60% of the Italian groups entrusted it to a group non-bank (normally an instrumental company), although the other forms of management are also present (*Figure 9*).

These results are in line with those obtained with the national Survey with reference to 2009, a year in which several instrumental companies were created – above all in the largest groups – to be entrusted with the management of the entire IT system.

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[3] Three groups, two Italian and one foreign, despite having a central IT governance structure used a different terminology from that proposed here.

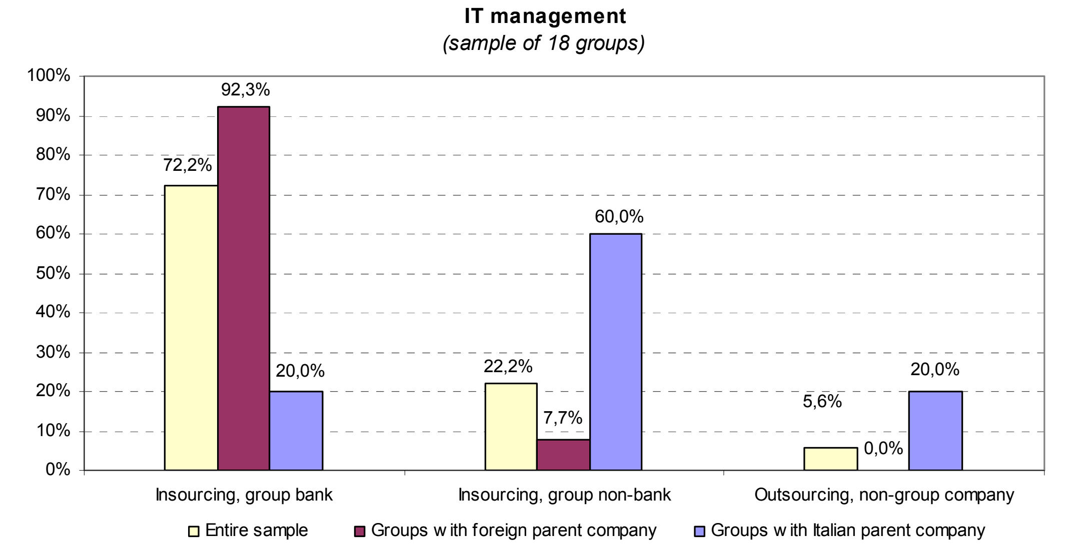

Figure 9

The most common organizational model of "IT factory" management adopted by the sample groups is "centralized with a few competence centers", followed by the strictly centralized model. By nationality, the former model is chiefly the prerogative of foreign groups (38.5%), which also make broad use (46% overall) of decentralized models; for the Italian groups, the "centralized" approach is the dominant option (60%; *Figure 10*). Thus while as we have seen the sample differs from that of the previous survey, the results confirm the same prevalent organizational orientation for both Italian and foreign banking groups.

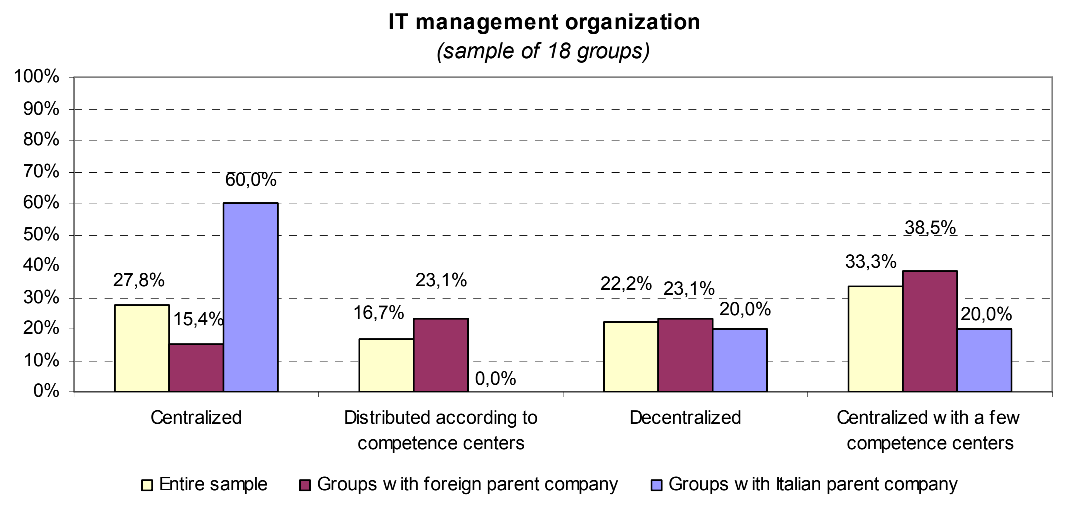

Figure 10

Crossing organizational model with the bank's main type of business,[4] half the groups that are engaged mainly in corporate and investment banking have decentralized

[4] For the classification of the sample groups by type of business, see the methodological note.

IT management, while 60% of the "mixed business" groups opt for centralized with a few competence centers according to line of business and 40% for the centralized model (*Figure 11*).

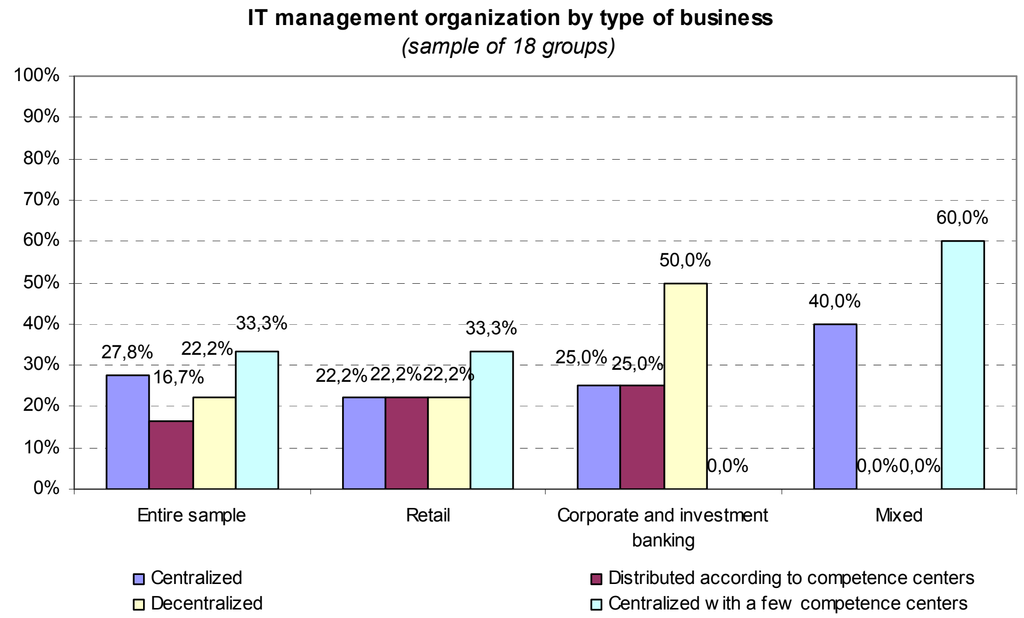

Figure 11

On the consolidation and rationalization of IT assets, between 40% and 60% of the sample report that they have not yet completed the consolidation of data centers and server farms. As to the unification of the telecommunications network at group level, the state of affairs is more diversified. Virtually all the foreign groups planned it, and 54% had already completed it, but just 20% of the Italian groups reported having completed network unification, while 40% stated that a project was under way (*Figure 12*).

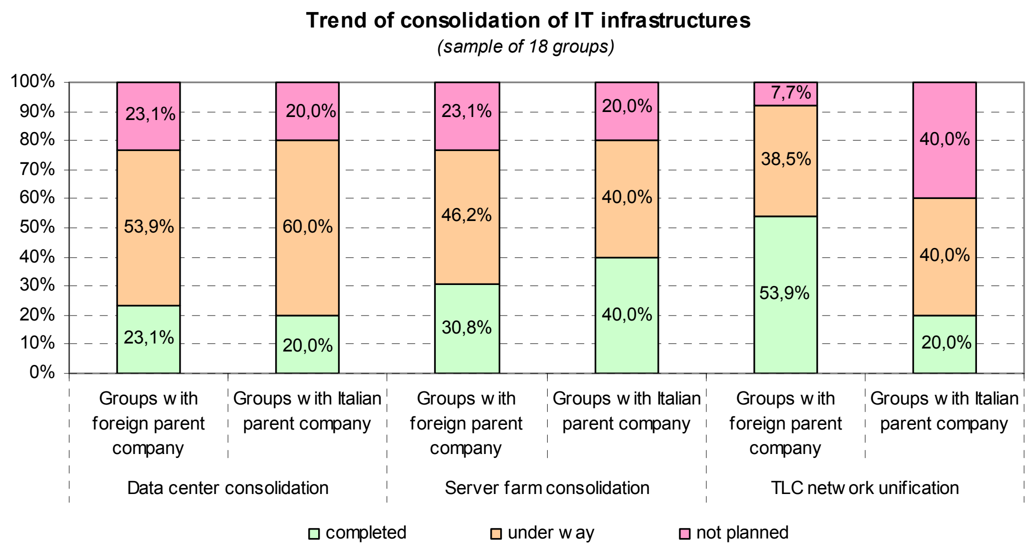

Figure 12

The survey, finally, also considered the use of surveys of internal user satisfaction with IT services. For the entire sample, 83% have conducted “customer satisfaction” surveys, more than half of these carry them out on a regular basis, and the practice is spreading further (*Figure 13*). There is no significant difference between the Italian and foreign groups in this regard.

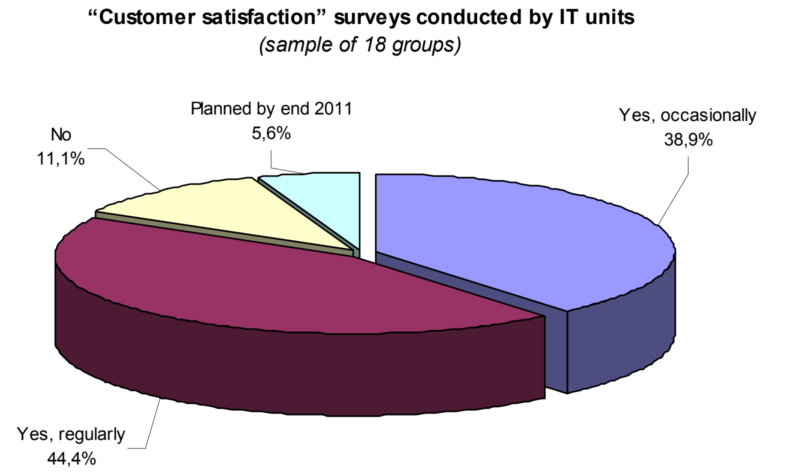

Figure 13

Factors that are taken into consideration by all the Italian groups are the functional adequacy of the applications and the “time to market”, while the foreign groups pay greater attention to service continuity (91%); for both parts of the sample (100% of the Italian groups, 91% of the foreign), the promptness of trouble-shooting of notified issues is decisive to measure user satisfaction (*Figure 14*).

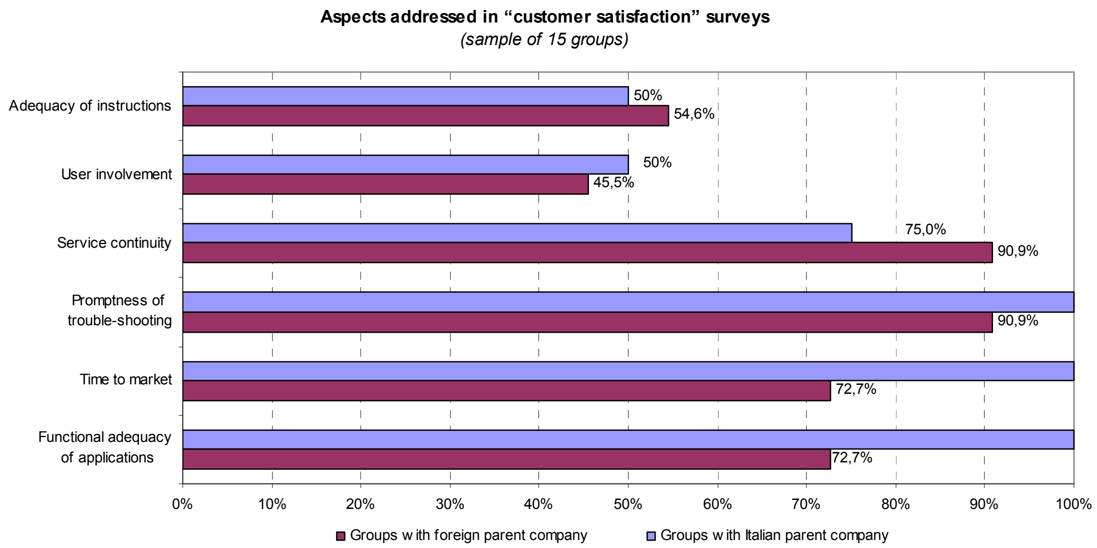

Figure 14

2. IT costs

2.1 Trends

To create a concise picture of the importance of IT costs to European banking groups, the survey contained questions on the Total Cost of IT Ownership (TCO) in 2009 and forecasts for 2010. Since the number of responses for the two years was different, in order to make comparisons on as uniform as possible a sample, the two data are analyzed separately, with two different samples (13 banking groups for 2009, 15 for the 2010 forecast). Both samples excluded groups whose ownership had changed or whose reported data were outliers.

As to IT costs for 2008-2009, the overall trend was slightly downward (−1.5%). By nationality, a sharp difference emerged: foreign groups' costs were basically stable (+0.2%), while the Italian groups recorded a significant fall (−6.4%), as the domestic Survey had already found[5] (*Figure 15*).

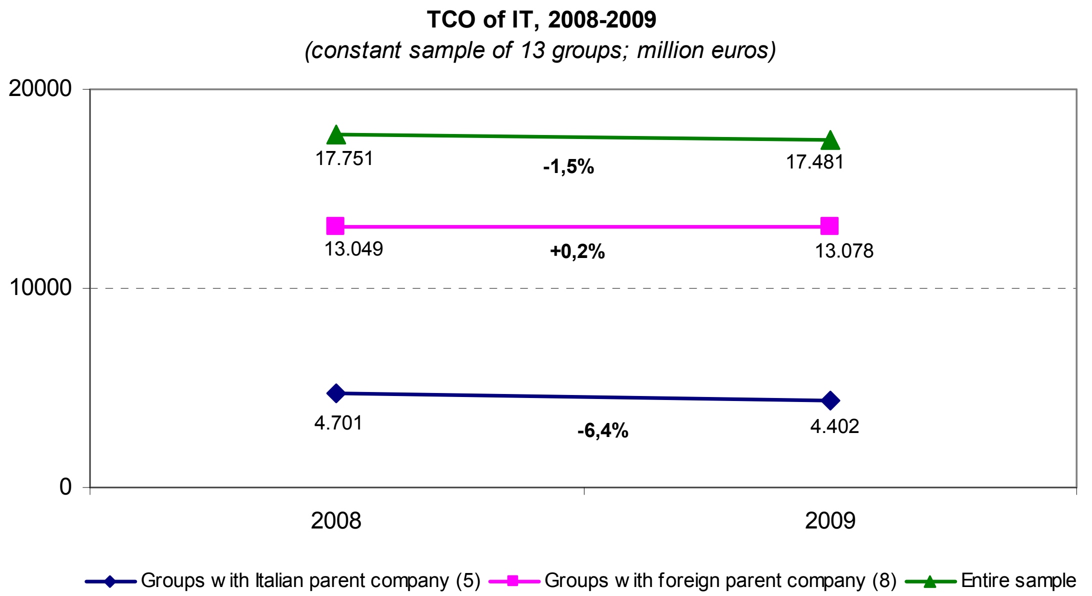

Figure 15

The overall forecast for 2010 was for cost growth (+5.3%). By nationality, the increase is accounted for entirely by the expected spending rise among foreign groups (+7.2%), while Italian groups again expected to spend less, albeit marginally (−0.9%) (*Figure 16*).

[5] It was found that the reduction for the Italian groups derived not only from cost-cutting measures but also from optimization and rationalization in connection with the completion of integration.

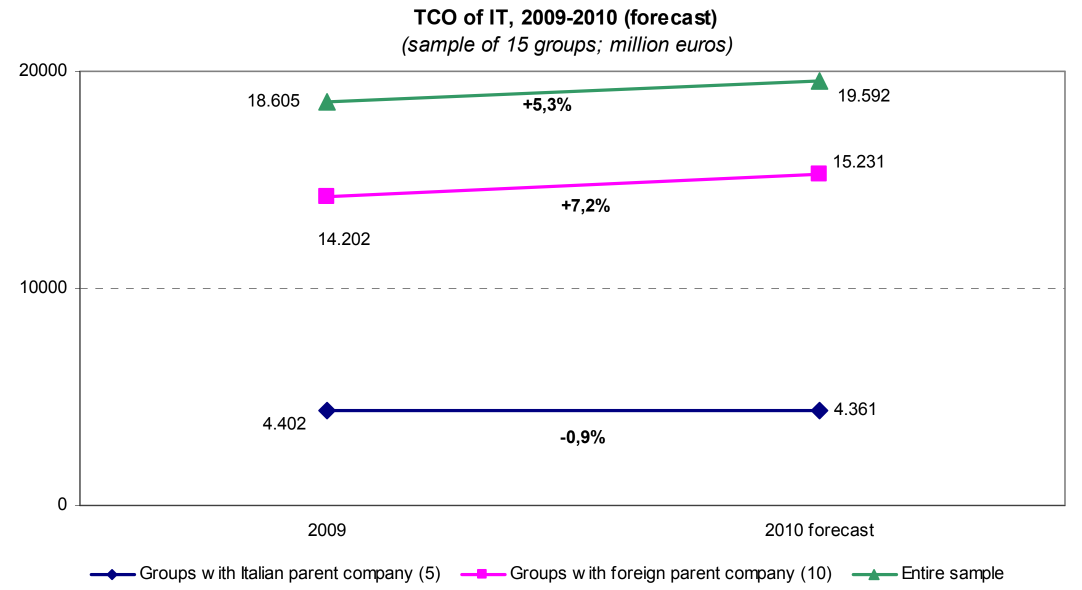

Figure 16

It must be borne in mind that these results depend strictly on the characteristics of the various banking groups in our necessarily limited sample: corporate structure, business operations and organizational models, size and geographical distribution of management and business centers. So the data only indicate tendencies; the point values cannot be considered representative of the entire system without due adjustment.

2.2 IT costs by productive factor and functional area

On the pattern of the national Survey, respondents were asked for the distribution of their IT expenditure according to "productive factors" and "functional areas".

By factor, "services received from third-parties" and "group personnel" together accounted for nearly 60% of IT costs (29% and 28% respectively); another 20% went for "software" (*Figure 17*).

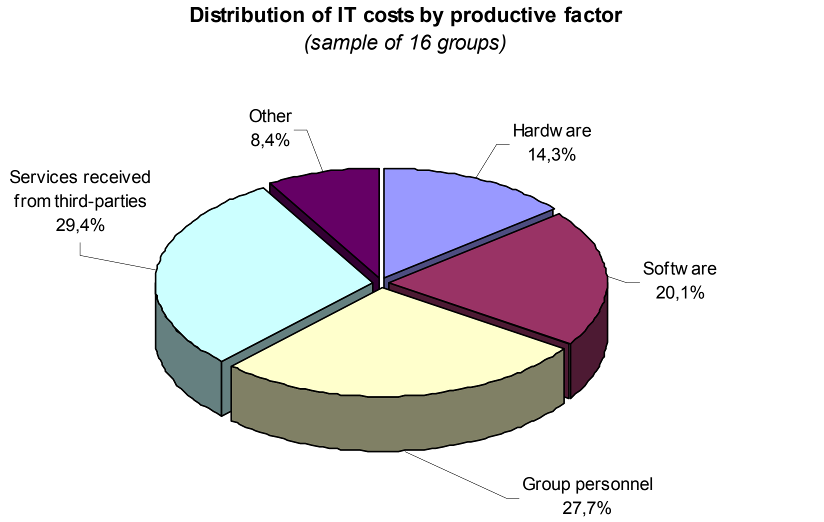

Figure 17

Disaggregating by the parent bank's nationality, the relative weights of the various factors differ considerably: "group personnel" is the main factor for the foreign groups (32.2%, compared with 17.9% for Italian groups), while "services received from third-parties" dominates among the Italian groups (36.2%, as against 26.4% for the foreign groups) (*Figure 18*).

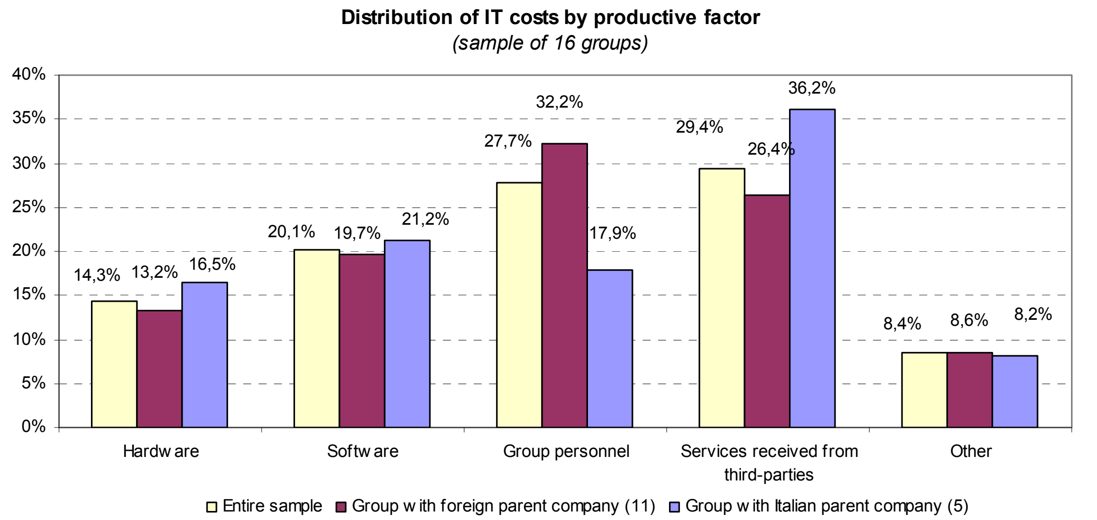

Figure 18

The data confirm what was found earlier on the methods of IT management: in the foreign groups insourcing prevails, in the Italian groups outsourcing is more prevalent.

By functional area,[6] the "Operations" area continues to account for the largest share of IT costs (about 50%), as in the national Survey (which showed a somewhat higher figure of 60%). A significant portion of the expense (20.1%) goes for "Support services" (*Figure 19*).

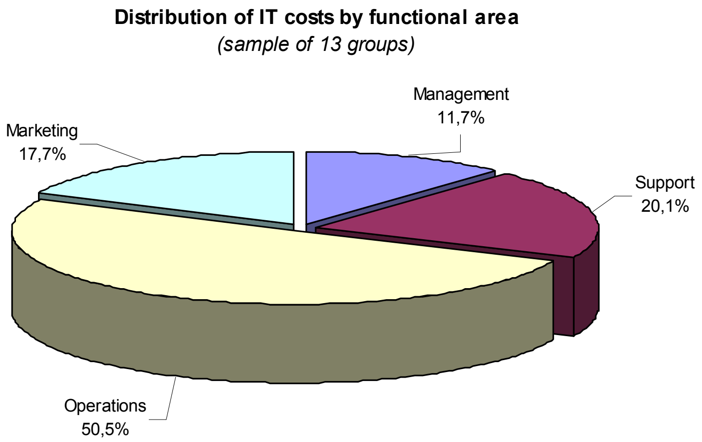

Figure 19

By parent bank nationality, the prevalence of the operations area in IT spending is more marked among Italian groups (62.5%) than foreign (43%). This area comprises most of the processing involved in typical banking activity, so the percentages reflect the Italian banks' greater concentration on retail banking business. The foreign groups, whose business also includes activities other than banking proper, report a more even division of IT outlays, with significant portions (25.5% as against 11.5% for Italian groups) also going to support services (*Figure 20*).

[6] The functional areas refer to the ABI Lab classification of banking processes. "Operations" area comprises credit, foreign sector, finance and treasury, payments and receipts, plastic money, other applications. "Marketing, sales and customer service" covers e-banking (ATMs, phone banking, call centers, internet banking/trading on line, corporate banking, mobile banking) and customer service. "Management" comprises management, auditing, compliance, risk management. "Support services" comprises administration and accounting, help desk, reporting to supervisory bodies, human resources, internal organization, IT process management, other services.

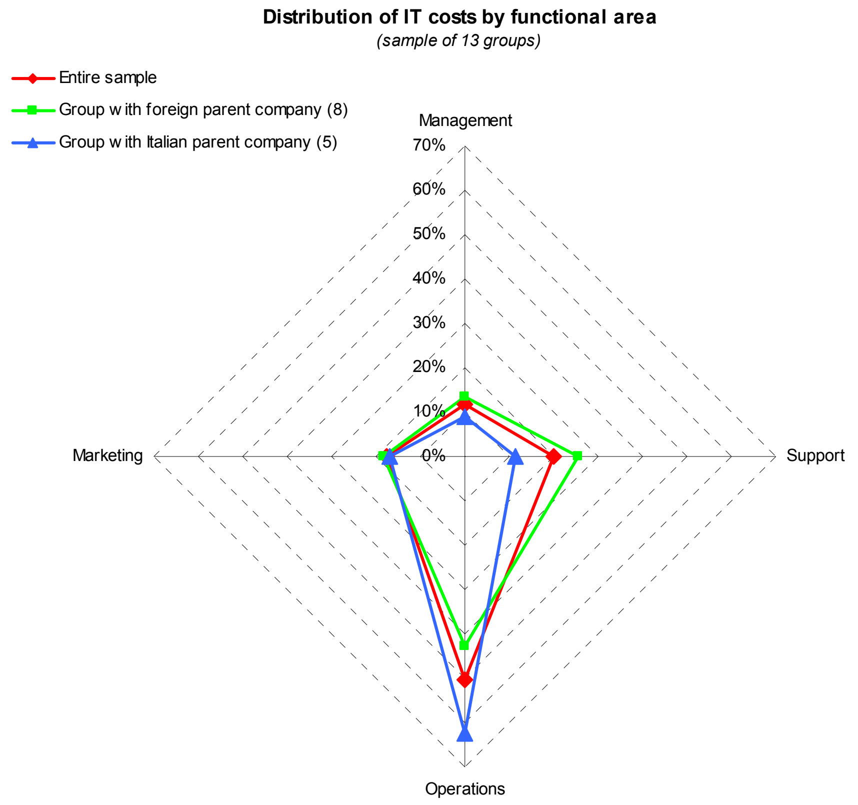

Figure 20

Another way of looking at IT expenditure is to distinguish between run-the-business (RTB) and change-the-business (CTB) costs, split in turn between business sectors proper and support functions. Again in 2009 RTB spending predominated, accounting for over two thirds (69% as against 31% for CTB spending). In both RTB and CTB, business expenditure is about twice support expenditure (*Figure 21*).

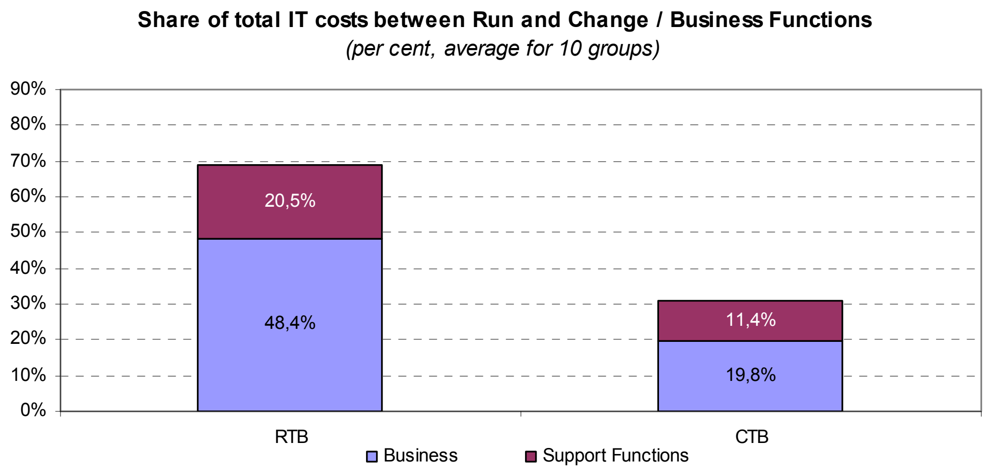

Figure 21

By nationality, the foreign groups are basically in line with the overall sample. The Italian groups tend more heavily towards RTB spending (73%, against 27% for CTB), as in 2008; and within RTB spending, business proper far outweighs support functions, 61% against 12% (*Figures 22* and *23*).

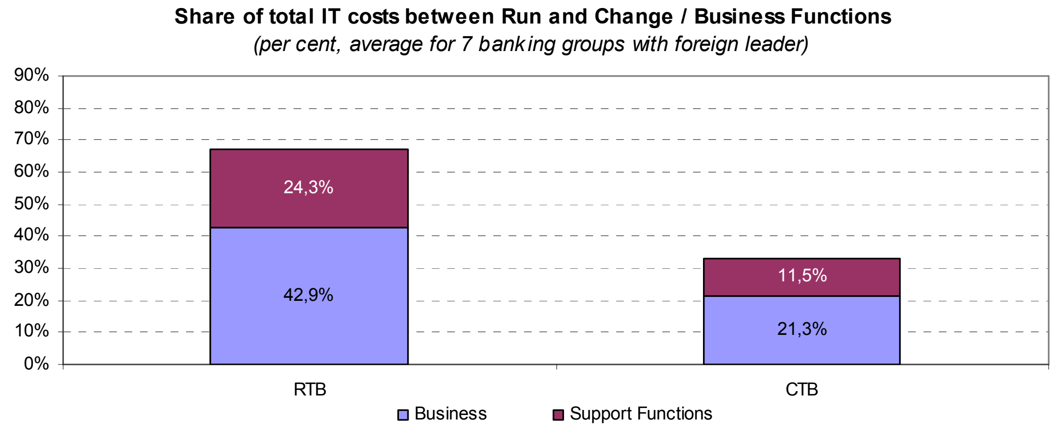

Figure 22

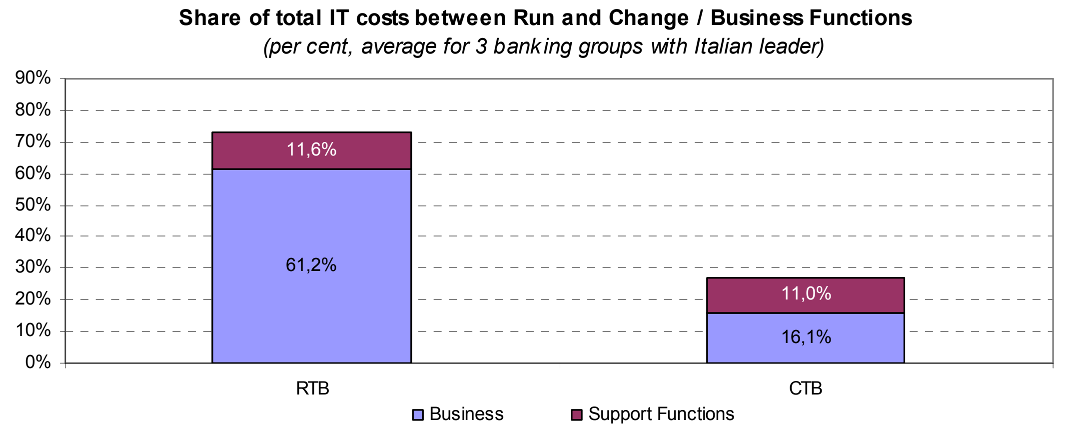

Figure 23

3. Technological innovation

3.1 Choices and investments

To complete the analysis of the total cost of ownership of IT, the survey has several questions on cash outlays, i.e. current spending plus investment, for technological innovation.

For the twelve groups that responded to this question, the European groups reported allocating about 11% of these cash outlays to innovative technology in 2009. By nationality, the percentages differed greatly: 4% for Italian groups, 16% for foreign ones.

Forecasts of future cash outlay for technological innovation reflect a similar pattern. For all the banks responding (13 groups), the situation is broadly positive: none expect decreasing outlays, the majority (62%) expects to increase their spending on this count, and the remaining 38% forecast stable outlays. By nationality, the foreign groups are far more inclined to see an upward trend (75%), while among the Italians the prevalent forecast is for stability (60%) (*Figure 24*).

	Expectations for expenditure on technological innovation	
	Rising	Stable
Groups with Italian parent company (5)	40%	60%
Groups with foreign parent company (8)	75%	25%
Entire sample (13)	62%	38%

Figure 24

Aside from quantitative measures, the survey also inquired into the choices, within a panel of instruments and technologies, that guided the investment made or planned for the next two years (2011-2012).

For the entire sample, innovation expenditure was directed mainly to VoIP, business intelligence, virtualization and green IT; and it was above all to serve internal needs. A significant portion of the planned investment will be allocated to support to customer services, with predominant recourse to WEB 2.0, mobile, business intelligence and contactless technologies. Another area of interest, both for internal functions and customer service, is cloud computing (*Figure 25*).

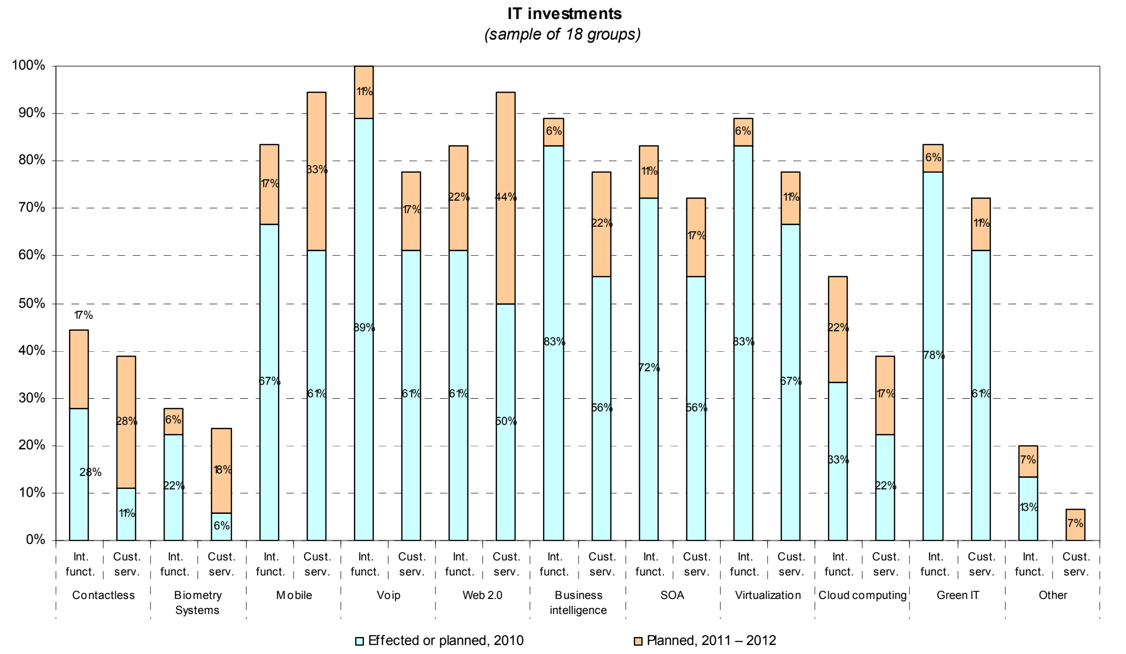

Figure 25

By nationality, most of the foreign groups report having practically completed their investment in VoIP, business intelligence, SOA and green IT, mainly for internal functions. For 2011-2012 investment will go mainly to WEB 2.0, mobile and business intelligence technologies with applications oriented to customer service; there is also some interest in biometric systems (*Figure 26*).

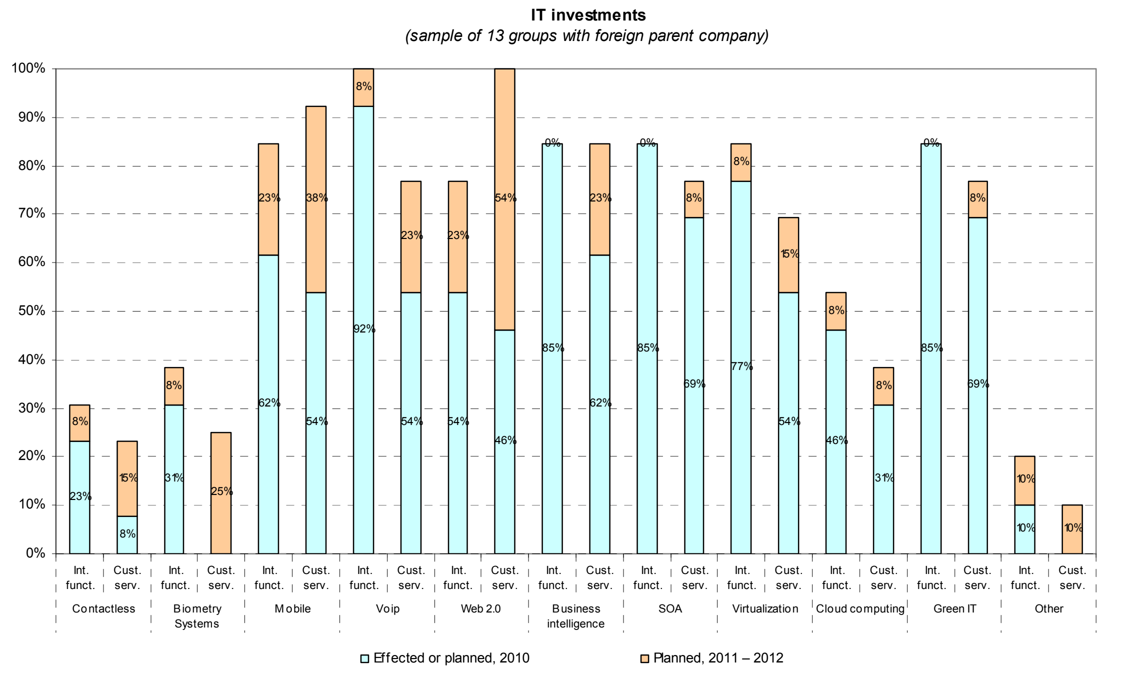

Figure 26

The Italian groups' investment was directed largely to virtualization, mobile, VoIP, WEB 2.0 and business intelligence, both for internal functions and for customer service. In their plans for 2011-2012, investment should go mostly to cloud computing, SOA and contactless technology, here again both for internal functions and for customer service (*Figure 27*).

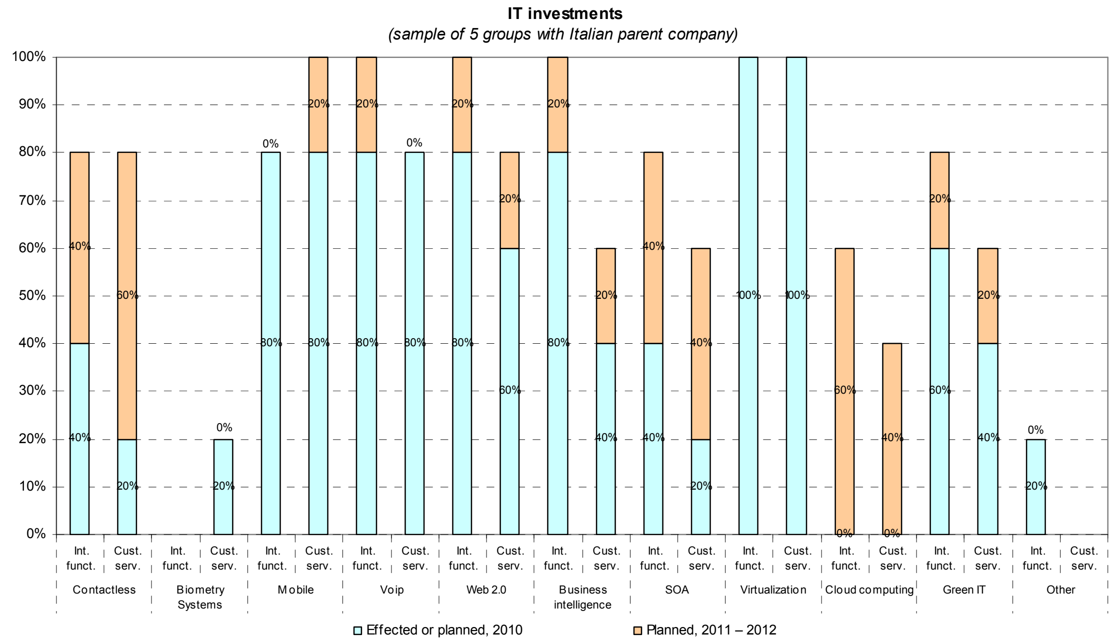

Figure 27

As to the way in which technological innovation is organized, nearly all the groups (94%) reported having, within the IT function, a unit for the assessment of new technologies and analysis of their benefits for the business. Most of the Italian groups (60%) had a formal, independent sector for this function, while most of the foreign groups (62%) did not have such an independent unit (*Figure 28*).

	Assessment unit, formal and independent	**Assessment unit, not independent**	**No assessment unit**
Groups with Italian parent company (5)	**60%**	**20%**	**20%**
Groups with foreign parent company (13)	**38%**	**62%**	**0%**
Entire sample (18)	**44%**	**50%**	**6%**

Figure 28

3.2 Customer contact channels and security

The issue of customer contact channels and the changes brought by new technology is highly topical. Despite the operational diversity of the groups surveyed, it is interesting to learn their assessments of expected trends in customers' use of the main channels of contact.

For the entire sample, the channels most commonly seen as on a rising trend are internet banking (100%) and mobile banking (89%), followed by ATM/self-service (67%); call centers are seen mainly as stable (50%), though 39% see this channel too as on the rise. Counters are also seen as stable or else declining (41% for each of these trends; *Figure 29*).

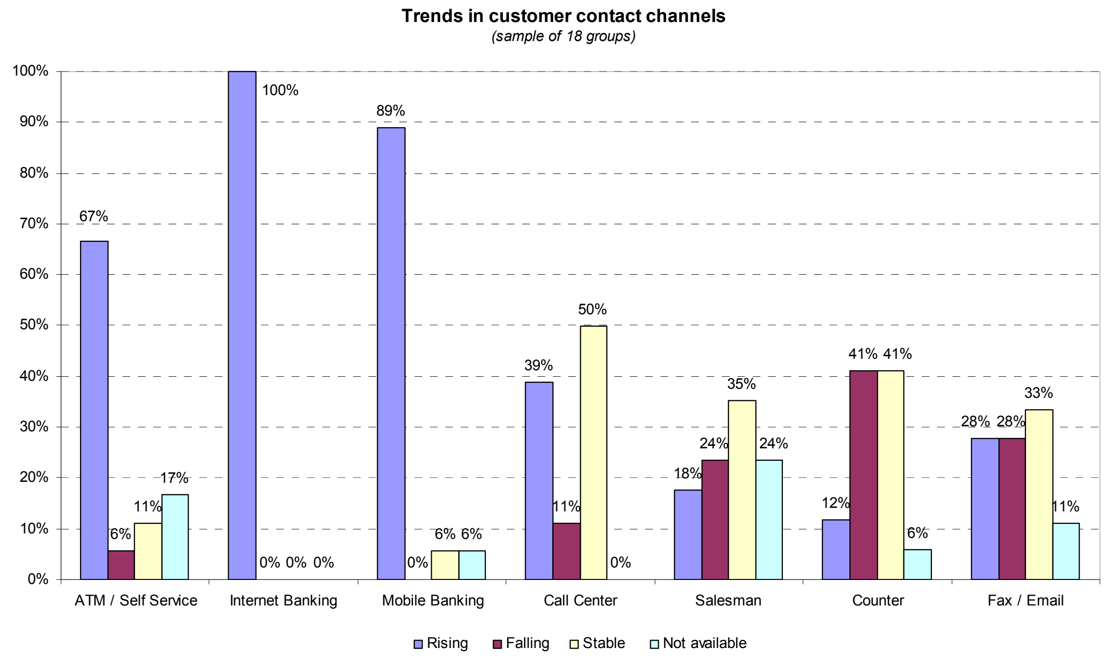

Figure 29

By nationality, the foreign groups are basically aligned with the entire sample, the Italians diverge partially, in particular as regards ATM/self-service, which 100% see as rising, and call centers, which 40% see declining (*Figures 30* and *31*). The differing assessment of the various channels of contact with customers depends in part on the differences in type of business, with the Italian banks engaged more heavily in retail banking and the foreign groups more in corporate and investment banking and private banking.

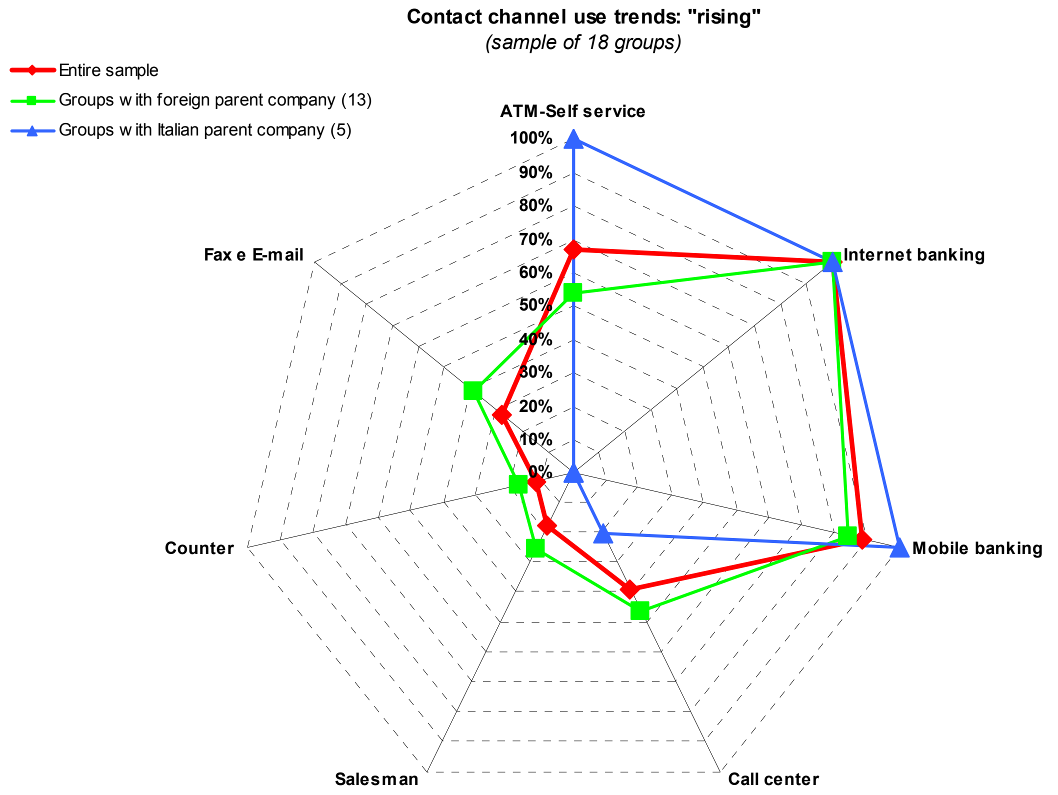

Figure 30

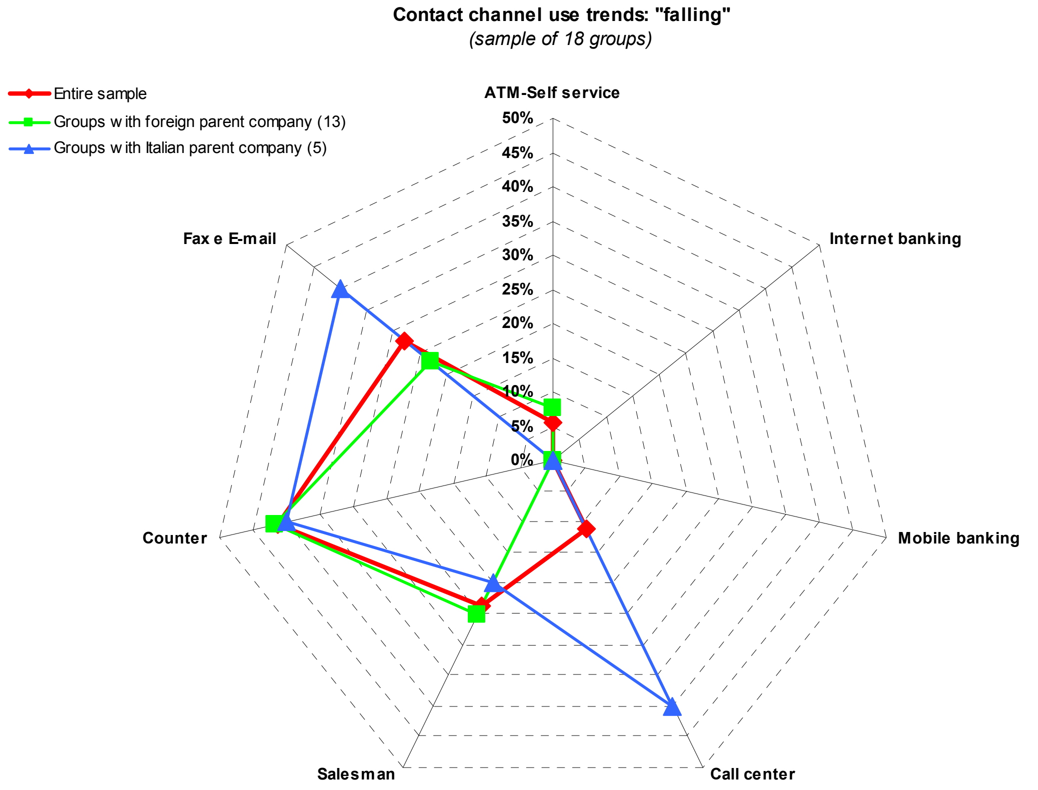

Figure 31

All the banks surveyed are sensitive to the special security problems that IT channels raise for customers, first of all the risk of identity theft. Accordingly, nearly all of them, regardless of nationality, instruct their customers in proper conduct, through publication of notices and warnings on their portals or websites. In practice, general notices to all customers, as part of the bank's periodic communications, are virtually never used; all the Italian groups and most of the foreign ones also plan to institute special rules of conduct addressed to Internet customers only (*Figure 32*).

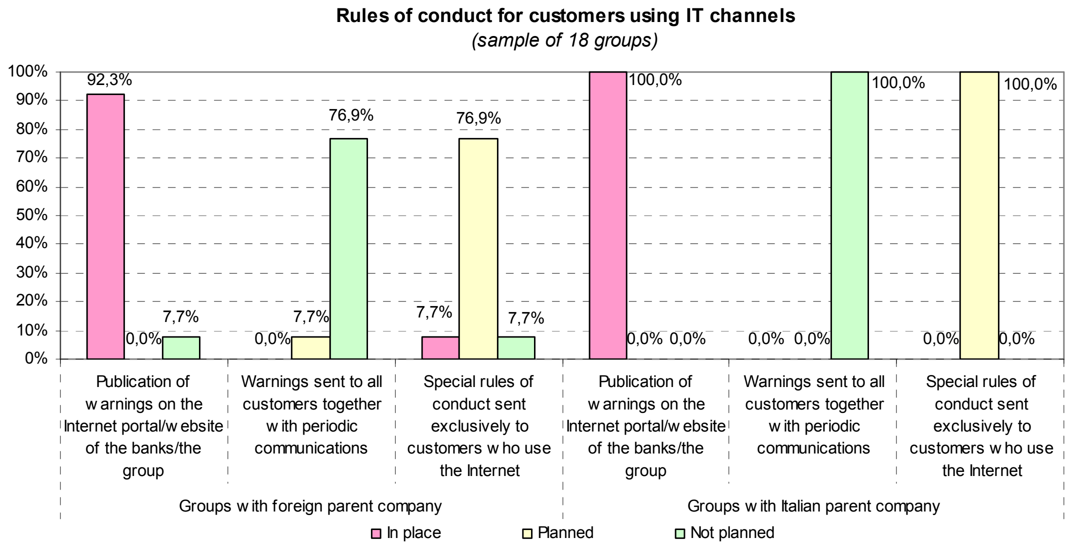

Figure 32

In addition, virtually all the groups have specific organizational countermeasures and security policies in place, including permanent units for this task. Universal measures include "strong authentication" of customers, codified procedures for responding to IT fraud, and specific controls on customer transactions for prompt detection of fraud. Cooperation with law enforcement bodies for the prevention/repression of fraud is also common, as is training of call center staff to provide customer support.

About 80% of the sample use techniques such as regular web scanning with special search software and log analysis to detect possible frauds, such as simulation of the websites of the group's banks.

4. Analysis of IT costs by indices

In analysing the economic side of IT, special attention was paid to the total cost of IT ownership in relation to other significant variables: total assets, operating expenses and gross income.[7]

The IT costs of the sample – excluding two groups that did not provide the accounting data – amount to an average of 0.17% of total assets, 12.2% of operating expenses and 8.1% of gross income, but with quite a wide range, especially for the latter two items, owing mainly to differences of nationality, size and type of business (*Figure 33*).

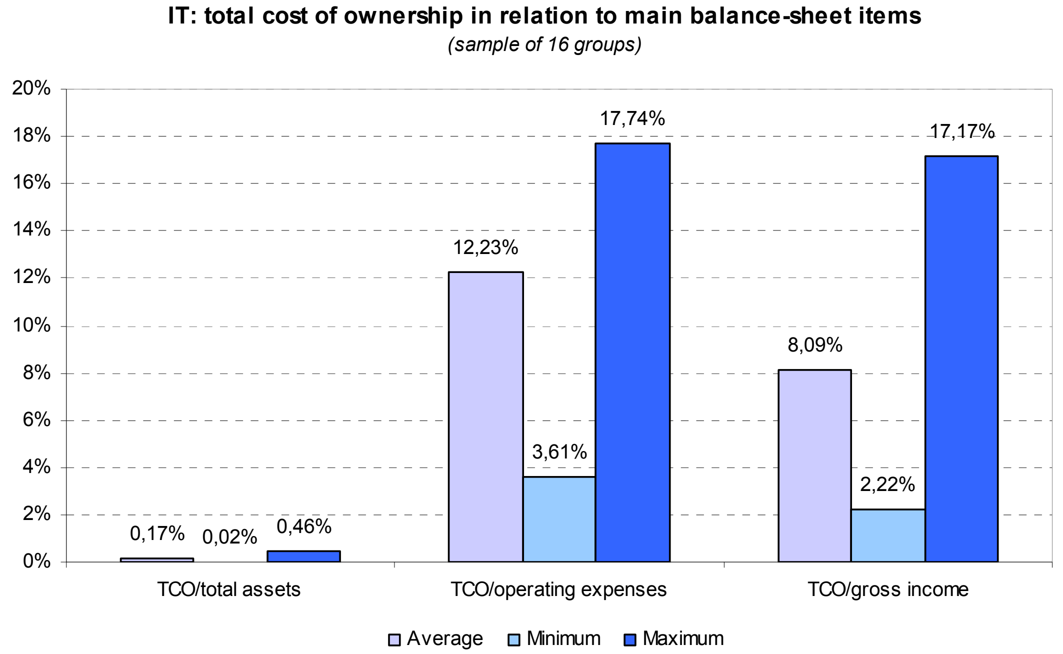

Figure 33

We are aware of the problems of comparability that ordinarily plague cross-country surveys,[8] and also that the sample comprises groups that are highly disparate in size, strategy and business operations. Even with these limits, though, we feel that the data offer useful indications concerning important aspects of IT management for a significant set of European banking groups (*Table 1*).

For greater consistency of the comparative analysis, the sample of groups that provided the quantitative data requested was divided into three subsets by size (total

[7] All the accounting data are supplied by the survey groups themselves.

[8] For the greatest possible uniformity of data, the instructions for filling out the questionnaire specified the standards for reporting and for the definition of the aggregates.

assets at December 31, 2009): major, large, and other. The “major” subset numbers seven groups,[9] “large” six and “other” five (see the Methodological Note).

On average, by comparison with the other two subsets, the “major” groups report a lower incidence of IT costs on total assets and gross income, while the incidence on operating expenses is similar to that of the “large” groups, and lower than that of the “others” (*Table 2*).

9 Only five of these seven major groups supplied the data requested.

International groups: IT cost indicators

Year 2009

Indicators	No. Groups	Average	Variation coefficient
IT costs/Total assets (per mille)	16	1.7	61.0%
IT costs/Operating expenses (%)	16	12.2	31.3%
IT costs/Gross income (%)	16	8.1	52.1%
IT costs per employee, excluding IT staff (thousand euros)	16	18.2	68.2%
IT staff/Total employees (%)	16	6.7	66.2%
Operating expenses/Total assets (%)	16	1.4	47.4%
Gross income/Total assets (%)	16	2.4	47.2%
Cost-income (%)	15	60.5	24.8%

Table 1

International groups: IT cost indicators

Year 2009

Indicator	Major Groups			Large Groups			Other Groups		
		Average	Variation coefficient		Average	Variation coefficient		Average	Variation coefficient
IT costs/Total assets (per mille)	5	1.4	26.2%	6	1.8	53.0%	5	1.9	86.8%
IT costs/Operating expenses (%)	5	11.6	23.0%	6	11.5	41.9%	5	13.7	27.9%
IT costs/Gross income (%)	5	6.5	29.3%	6	8.2	65.3%	5	9.6	48.3%
IT costs per employee, excluding IT staff (thousand euros)	5	15.1	24.7%	6	19.7	95.2%	5	19.5	53.1%
IT staff/Total staff (%)	5	6.7	50.1%	6	6.3	86.6%	5	7.2	69.1%
Operating expenses/Total assets (%)	5	1.2	11.3%	6	1.5	30.3%	5	1.5	78.0%
Gross income/Total assets (%)	5	2.3	30.6%	6	2.6	41.6%	5	2.1	75.0%
Cost-income (%)	5	56.1	15.3%	5	56.5	23.8%	5	68.9	29.1%

Table 2

APPENDIX

Methodological note

The survey questionnaire is available on the CIPA website (www.cipa.it). The data were acquired via the Bank of Italy Internet data collection structure, accessible with a direct link from the CIPA site.

During data acquisition and checking, special procedures identify outliers. Where there are outliers, if they cannot be corrected the group involved is excluded from the processing and analysis of those particular data.

In some charts, the numbers are affected by errors in rounding to the first or second decimal place, so the totals are not always 100%.

The average percentages given in the charts are always computed by first measuring the variables for each group and then averaging them. This procedure attenuates the effect of the presence within the sample of groups whose size and economic variables are not always comparable.

The participation of the foreign groups came both through the CIPA member banks whose parent bank is resident in another country and through their branches in Italy, with the organizational collaboration of the Milan branch of the Bank of Italy.

The economic and organizational data always refer to the entire group.[10]

For the Survey, the groups are classed both by nationality (residence of parent company) and by size.

The size classification was determined by reported "total assets" at December 31, 2009, with three classes (seven "major" groups, six "large" and five "others").

For this Survey, a further classification was introduced, namely main type of business activity. A specific question asked respondents to give the percentage of total business activities accounted for by specific sectors: retail banking, corporate/investment banking, private banking, other.[11] This classification was used to show the way in which organizational options in IT management change with market segments.

The composition of the sample groups according to type of business and size is given in *Figure 34*.

[10] In the Italian national survey, the data refer only to the Italian banking component of each group. Thus the data for the Italian groups covered in this international survey are different from those in the national survey.

[11] The classification by type of activity is determined by the declared percentages given in question 1b. The groups that reported, for any type of activity, a percentage of more than 50% were classed in the set of banks engaging in that type of activity; for percentages of 50% or less, the respondent was classed as engaged in "mixed" activity. No group reported more than 50% for "private banking", which was accordingly not considered in the classification.

Sample groups by size and main type of business activity

(size by total assets; sample of 18 groups)

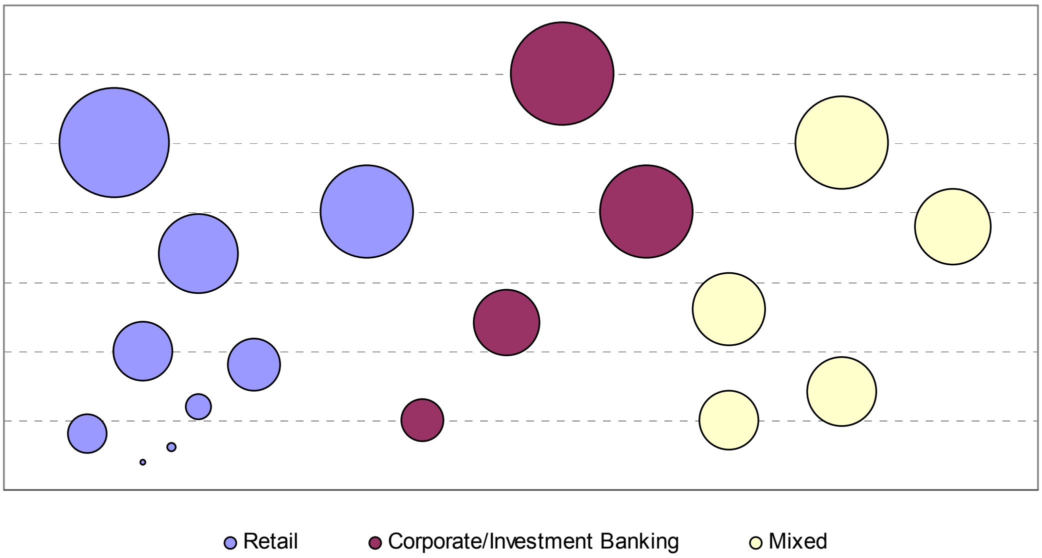

Figure 34

Classification by nationality of parent bank

<u>Groups with Italian parent company (5)</u>

Banco Popolare

Gruppo Banca Sella

Intesa Sanpaolo

Unicredit Group

Veneto Banca Holding

These are the same groups that participated in the 2008 Survey.

<u>Groups with foreign parent company (13),</u> of which:

- participating via group banks belonging to CIPA (4)

BNP Paribas,* France (via BNL)

Crédit Agricole Group,* France (via Cariparma)

Deutsche Bank AG ,* Germany (via Deutsche Bank)

Dexia Credit Local SA, France (via Dexia Crediop)

- participating via branches in Italy (9)

Banco Bilbao Vizcaya Argentaria SA,*, Spain

Barclays Bank plc,* United Kingdom

Commerzbank AG,* Germany

Credit Suisse,* Switzerland

ING Direct NV,* Netherlands

Rabobank,* Netherlands

Royal Bank of Scotland, United Kingdom

Santander,* Spain

UBS,* Switzerland

Groups with foreign parent company marked by (*) participated in the 2008 Survey. ING Direct NV participated as an independent group, not as ING Groep.

Size classification

<u>Major groups</u> ("total assets" greater than €1,000 billion) (7)

Barclays Bank plc

BNP Paribas

Crédit Agricole Group

Deutsche Bank AG

Royal Bank of Scotland

Santander

UBS

<u>Large groups</u> ("total assets" of €500 billion to €1,000 billion) (6)

Banco Bilbao Vizcaya Argentaria SA

Commerzbank AG

Credit Suisse

Intesa Sanpaolo

Rabobank

Unicredit Group

<u>Other groups</u> ("total assets" less than €500 billion) (5)

Banco Popolare

Dexia Credit Local

Gruppo Banca Sella

ING Direct NV

Veneto Banca Holding

Classification by business activity

Mainly retail banking (9)

BNP Paribas
Banco Bilbao Vizcaya Argentaria SA
Banco Popolare
Crédit Agricole Group
Gruppo Banca Sella
ING Direct NV
Intesa Sanpaolo
Santander
Veneto Banca Holding

Mainly corporate and investment banking (4)

Credit Suisse
Deutsche Bank AG
Dexia Credit Local
Royal Bank of Scotland

Mainly "Mixed" (5)

Barclays Bank Plc
Commerzbank AG
Rabobank
UBS
Unicredit Group

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