

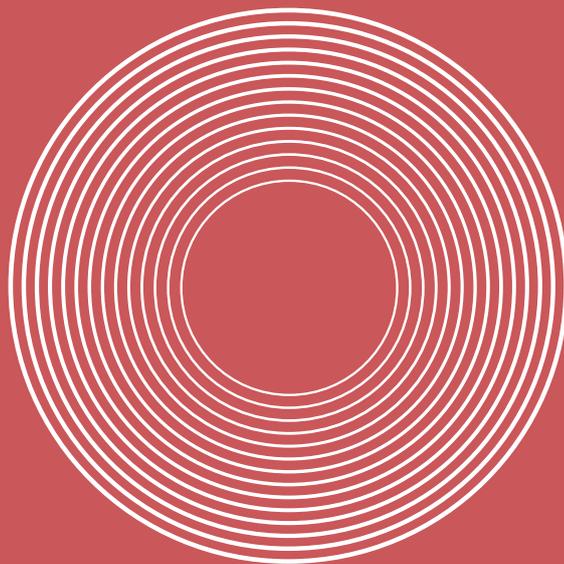


OESTERREICHISCHE NATIONALBANK

Stability and Security.

INTELLECTUAL CAPITAL REPORT 2005

Knowledge for Stability



The Intellectual Capital Report has been published since 2003 as a review of the OeNB's intellectual capital and its use in the OeNB's business processes and services. The report provides an integrated view of the strategically important management of human, relational, structural and innovation capital; it clarifies the relationships between different types of capital and describes various determinants that influence the OeNB's intellectual capital. The findings of the report serve to assess the consistency of the OeNB's intellectual capital with its knowledge-based strategic orientation.

Coordination

Heidi Koller

Contributions

Brigitte Alizadeh-Gruber, Markus Arpa, Karin Donnerbauer, Gernot Ebner, Manfred Fluch, Hermine Freitag, Doris Haider, Gerhard Hohäuser, Robert Holzfeind, Oliver Huber, Georg Hubmer, Elisabeth Kerbl, Susanna Konrad-El Ghazi, Romana Lehner, Anton Schautzer, Doris Schneeberger, Aurel Schubert, Stefan Varga

Editorial processing

Brigitte Alizadeh-Gruber, Rena Mühldorf

Translation

Jennifer Gredler, Rena Mühldorf, Susanne Steinacher

Technical production

Peter Buchegger (design)

Franz Pertschi (layout, typesetting)

OeNB Printing Office (printing and production)

Inquiries

Oesterreichische Nationalbank, Communications Division

Postal address: PO Box 61, AT 1011 Vienna

Phone: (+43-1) 404 20-6666

Fax: (+43-1) 404 20-6698

E-Mail: oenb.info@oenb.at

Orders / address management

Oesterreichische Nationalbank, Documentation Management and Communications Services

Postal address: PO Box 61, AT 1011 Vienna

Phone: (+43-1) 404 20-2345

Fax: (+43-1) 404 20-2398

E-Mail: oenb.publikationen@oenb.at

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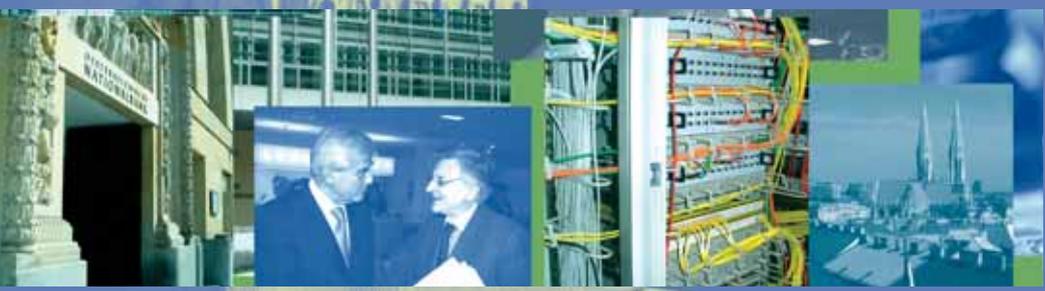
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OESTERREICHISCHE
NATIONALBANK



ÖBNE KASSE
Spendenkasse

Foreword

In an industrial society that is currently being transformed into an information society and is on its way to becoming a knowledge society, people obviously cannot embark on their careers already equipped with an entire life's worth of knowledge. Much rather, life-long learning – especially at work – is indispensable for employees to hold their own in times of growing European integration and globalization.

More than ever, employees' knowledge and experience will make or break a company in the future. The Oesterreichische Nationalbank (OeNB) has recognized the need to identify valuable immaterial capital – such as staff expertise, networks, productivity, flexibility and mobility – that is not captured by traditional financial statements, to safeguard it over time and to manage its development. To this end, the OeNB has taken stock of its immaterial capital in an intellectual capital report for three years now. Whereas financial statements represent the stock of material capital and performance as at a particular date, an intellectual capital report is a statement of human capital developments that delineates the actual state of human, structural and relational capital from the perspective of its impact on a company's future success.

Our experience with this reporting tool, which has become a key strategic instrument for the OeNB, is positive as well as encouraging. After all, reliable methods and models to assess and measure indicators are the prerequisite for successful, effective management of knowledge and experience capital.

To ensure the optimum allocation of staff, i.e. human capital, the OeNB pursues the aim of identifying employees with a high development potential, nurturing this potential in the best possible fashion and thus enhancing these employees' skills. To this end, the OeNB launched a project in 2005 to identify employees with a high development potential.

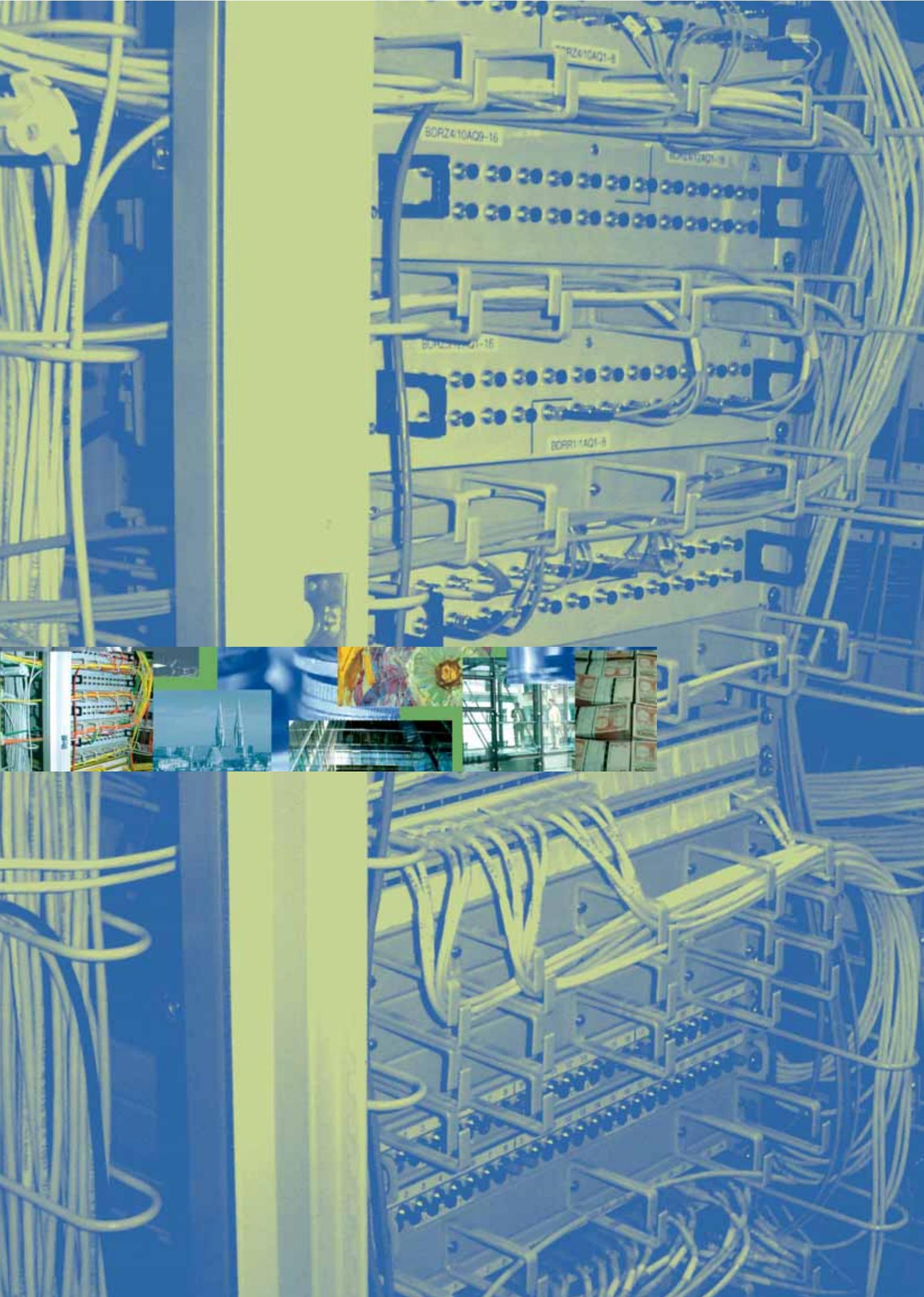
The importance of mobility and flexibility is growing at the European and at the international level – the world of central banking is no exception. In the review year, the OeNB further intensified and internationalized its networking and communication activities. With its expertise, the OeNB is a hub for knowledge and dialogue, not just in the direct exchange of experience with Eurosystem and other central banks, but also as an interface to Austrian economic players, policymakers and the general public.

In addition to its utility as a business management tool, the Intellectual Capital Report also makes the quality of the OeNB's performance more transparent. It is designed to provide a more in-depth view and understanding of the manifold activities of the OeNB as an integral part of the Eurosystem. Therefore, the experience and knowledge that the OeNB has accrued is subject to constant reassessment and adjustment: only steady development drawing on a long tradition will guarantee that that OeNB continues to make the best possible contribution to stability and security in the future.

Governor Klaus Liebscher

*“We are drowning in information
but starved for knowledge.”*

John Naisbitt



1 Intellectual Capital Report Model and Knowledge Goals

1.1 Knowledge Goals

The OeNB is a modern service provider which sets great store by knowledge management. An important success factor in knowledge management is the establishment of medium-term goals. The knowledge goals described below are derived from the OeNB's strategic goals. They establish the framework for the use and development of knowledge-based capital and tie in logically with the OeNB's mission statement and strategy.

The OeNB's Knowledge Goals

Competence through specialized knowledge

The OeNB is an active player in the Eurosystem and has established itself as a recognized center of competence. This requires identifying key topics with a guaranteed potential for the future and accumulating and further developing relevant, high-quality specialist knowledge.

To this end, OeNB staff in all business areas must have highly specialized knowledge and must show top-level ability to perform well, a distinctive willingness to learn and great flexibility. Versatile personnel management instruments and targeted training and education measures are crucial factors supporting and promoting this requirement.

Confidence through knowledge transfer

Public confidence in the top-quality fulfillment of central banking tasks is every central bank's most important asset. To keep it at a high level, the OeNB pursues an active information policy. The proactive transfer of knowledge is targeted at increasing the public's understanding of how a central bank works and thus contributes to ensuring public confidence.

Active communication and cooperation with its customers enables the OeNB to continually improve its products and services and to adapt them to market requirements.

Interdisciplinarity through internationality and cooperation

The OeNB aims at ensuring financial stability in Austria and at contributing to the smooth functioning of the Eurosystem both through strong links between the OeNB's various sections and national as well as international partners, and through close cooperation within the OeNB group¹ itself.

To fulfill these tasks in the best possible way, the OeNB seeks out cooperation with numerous partners, e.g. Eurosystem counterparts, commercial banks, public authorities and scientific institutions.

Efficiency through modern management

The OeNB strives to constantly improve its business processes and services. Improvements relate both to economic aspects (i.e. the efficient performance of tasks within the entire group) and to the reliable and high-quality execution of operational tasks. Special emphasis is placed on the management of operational risks.

The OeNB aims at achieving the highest possible level of efficiency by further developing its business administration expertise and by using innovative methods and techniques as well as a secure infrastructure.

¹ The term "group" is used as in the Annual Report.



KNOWLEDGE-BASED CAPITAL

BUSINESS PROCESSES

RESPONSIBILITIES AND SERVICES

MISSION STATEMENT

KNOWLEDGE GOALS

STRATEGY 2003 – 2006

HUMAN CAPITAL

STRUCTURAL CAPITAL

RELATIONAL CAPITAL

INNOVATION CAPITAL

Preparing monetary policy decisions – Economic analyses

Implementing monetary policy decisions – Treasury

Basic information for monetary policymaking and financial supervision – Statistics

Cash supply – Payment instruments and payment systems

Financial supervision and financial stability

External communications and international relations

Management support and infrastructure

Monetary policy

European integration

International financial architecture

Information infrastructure

Involvement in financial supervision

Payment systems and payment instruments

Product innovation

Other public goods

Communications



1.2 The OeNB's Intellectual Capital Report Model

For its Intellectual Capital Report, the OeNB has chosen a process-oriented model that establishes a close connection between knowledge-based capital, business processes and the OeNB's services and responsibilities. The interaction between the different types of capital and business processes as well as services is detailed in the next chapters.

The stock and flow of intellectual assets are described not only in words and charts, but also by indicators allowing for the quantification and assessment of changes over time. The OeNB defines medium-term development goals for many of these indicators, reflecting the targeted management measures it intends to take.

The quality of the OeNB's services is determined to an overwhelming extent by the economically sound deployment of its knowledge-based capital. Ultimately, however, the success of the OeNB's products and services hinges on their usefulness to customers. Consequently, the priority of knowledge transformation is the steady improvement of customer benefit. Knowledge acquired while rendering services changes intellectual capital and makes its mark on future Intellectual Capital Reports.

The constant improvement of the tried and tested Intellectual Capital Report model enables the OeNB to draw increasingly accurate conclusions for the future. Hence, the model is a feedback control system in which knowledge flows are the main element. The structures of the report must not become rigid; they must evolve constantly.

The Intellectual Capital Report provides an integrated view of the OeNB; it clarifies the relationships between different types of capital and describes various determinants that influence intellectual capital. The findings of the report serve to assess the consistency of intellectual capital development with the OeNB's knowledge-based strategic orientation. This insight allows the OeNB to rank actions and measures by their priority and hence contributes actively to efficient process design and process optimization. The Intellectual Capital Report is an integral part of internal control mechanisms and an important tool within the OeNB's external communications repertoire. By establishing the Intellectual Capital Report as an information tool, the OeNB has devised a method to reliably assess intellectual capital and to reinforce transparency and confidence, both of which are essential for a modern central bank.

The partial integration of the Intellectual Capital Report into the OeNB's Annual Report is testimony to its growing importance. The information about knowledge-based capital and its development represents an ideal complement to the information about the OeNB's overall performance in the Annual Report.

2 Knowledge-Based Capital

2.1 The Four Knowledge-Based Capital Types

The assessment of the four knowledge-based capital types depicted in the Intellectual Capital Report represents a key management instrument. With these capital types the OeNB adds value – meaning that it uses them (to different extents and in various combinations) for its business processes and to render services.

1. **Human capital** comprises staff structures as well as the staff skills applied to business processes. It is captured by indicators which relate to e.g. “number of working visits to national and international organizations” and “number of completed and certified training courses.”
2. **Structural capital** encompasses both the organizational framework and the technical infrastructure designed to ensure smooth business operations. Examples of related indicators are “number of product managers” and “availability of the ARTIS payments system.”
3. **Relational capital** indicators illustrate the OeNB’s focus on cooperation and its network of national as well as international customers and partners, and its dealings with the public. In this context, the OeNB reports e.g. the “number of international bodies with OeNB representatives” or the “confidence index,” which is compiled on a quarterly basis by an external polling institute.
4. **Innovation capital** comprises the resources the OeNB needs to remain successful in the future. Some key indicators are “percentage of staff resources utilized for innovative projects” and “internal R&D expenditure.”

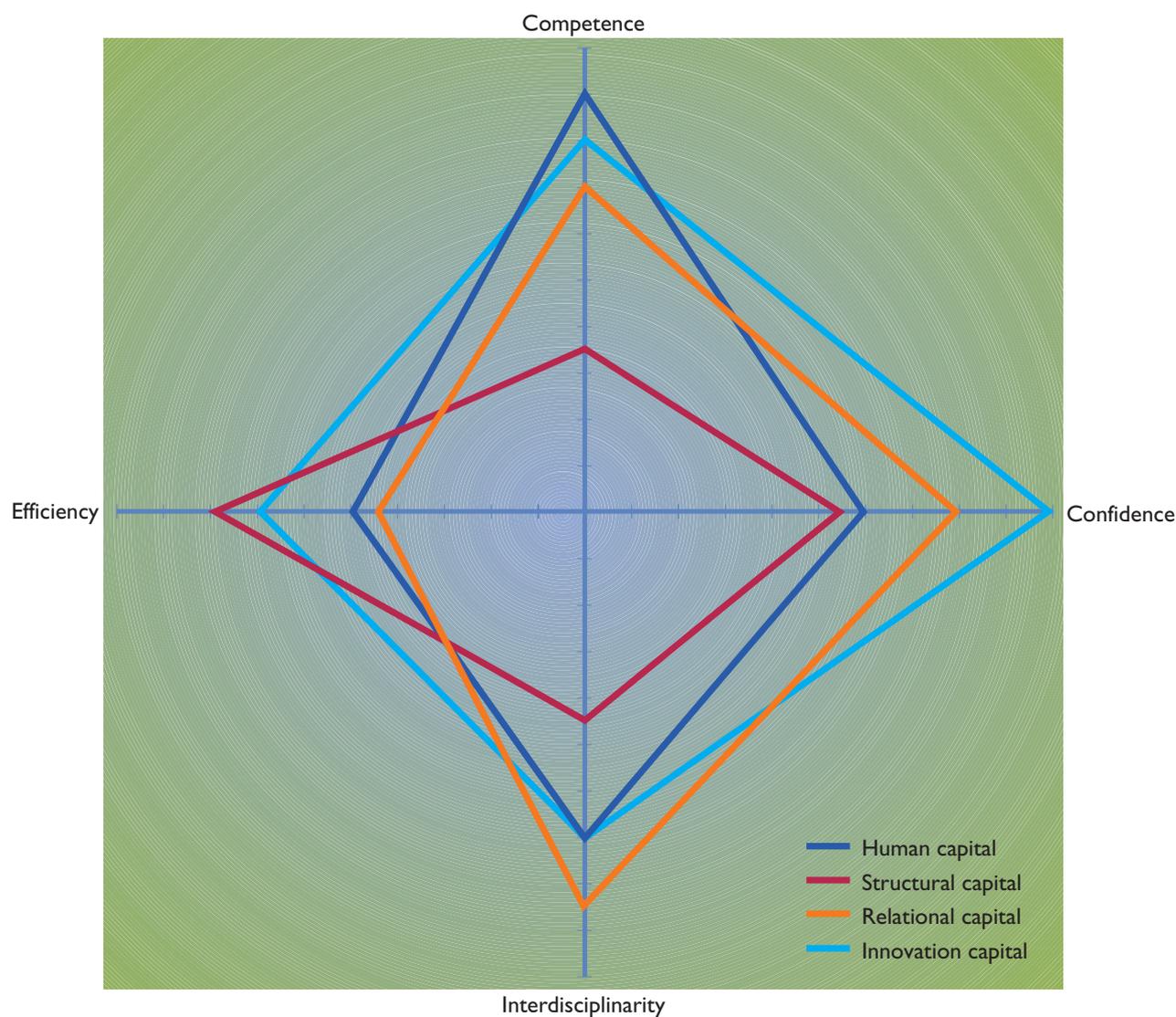
When applied and transferred, knowledge turns into a good that offers rising returns. Consequently, investment in knowledge-based forms of capital in general has a long-term effect on the quality of the implementation of business processes and thus on sustainable corporate success. Moreover, knowledge-based capital has to be viewed from the overall process perspective: If staff members (human capital) prepare a joint position together with members of the European System of Central Banks (ESCB) (relational capital) using appropriate technical systems (structural capital), they render a service to the OeNB while at the same time enlarging the knowledge base they will be able to build on in the future (innovation capital).

Mobilizing the four knowledge-based capital types (human, structural, relational and innovation capital) enables the OeNB to reach its knowledge goals in the medium term. Experts have analyzed the connection between knowledge goals and the mobilization of knowledge-based capital and have captured it in a chart (*see below*).

All four capital types are tapped to reach every knowledge goal: Employee expertise is the main input needed to attain the knowledge goal “competence.” However, regular innovation and good relations also contribute to achieving this goal. Products and services are steadily upgraded.



Contribution of Knowledge-Based Capital Types to Achieving Knowledge Goals



When innovations are made, upholding public confidence in the OeNB's products is an important objective to bear in mind. In the development of relational capital, cooperation and networking are key concepts. Participation in committees, working groups, events and lectures is crucial to ensure interdisciplinarity. Structures have to operate smoothly if tasks are to be fulfilled efficiently. Also in this context, steady innovation by experts is indispensable.

The indicators presented in the next chapters compare the most recent values, those for 2005, with the values of 2004. Medium-term targets are indicated in the form of arrows for areas in which the OeNB takes management measures to reach knowledge goals.

2.2 Human Capital

Indicators	Value 2005	Target	Corresponding knowledge goals				Value 2004
			Competence	Confidence	Interdisciplinarity	Efficiency	
Staff structure							
Headcount (<i>average</i>)	947.5	↘	●			●	970.3
Fluctuation rate (<i>year-end</i>)	0.9	→		●			1.2
University graduates (%)	32.4	↗	●				32.9
Flexible working arrangements							
Part-time employees (%)	7.3	→	●			●	7.5
Staff in teleworking scheme (%)	4.0	→	●			●	2.0
Staff on sabbatical (%)	9	→	●			●	8
Diversity management							
Women (%)	39.2	↗	●				40.0
Women in specialist positions (%)	19.6	↗	●				23.2
Women in management positions (%)	17.9	↗	●				17.0
Knowledge transfer							
Training days per employee (<i>annual average</i>)	3.8	→	●		●		5.2
Training participation rate (%)	59.9	→	●		●		68.4
Cost of training and education per employee (<i>EUR</i>)	2,150	→	●				2,087
Number of completed and certified training courses (<i>in-service</i>)	18	→	●		●		10
Number of internal job rotations	38	↗	●			●	32
Number of working visits to national and international organizations	25	↗	●		●		14
Number of employees with external teaching assignments	22	↗	●	●	●		19

As the OeNB relies strongly on the expertise of its staff, employee expertise is its most important asset with respect to human capital. Hence, the development of staff quality represents a crucial success factor.

At the end of 2005, the number of staff employed by the OeNB came to 947.5 (full-time equivalents). The OeNB continued the highly restrictive hiring policy it adopted in 2004 throughout 2005, and promoted employee flexibility and mobility even more strongly.



Employment models such as part-time schemes, teleworking and sabbaticals provide for maximum flexibility in the organization of working hours and are well accepted by OeNB staff. The share of part-time employees remained constant at 7.3% of total headcount. By contrast, the share of employees in the teleworking scheme doubled. The shares of participants in all three models are expected to remain at the current levels.

The OeNB's personnel development activities concentrated on creating incentives and means to enhance staff mobility. The job rotation scheme was further supported by the introduction of a new electronic information platform at the OeNB. These schemes support employees who wish to gain some work experience at the ECB, another national central bank (NCB), one of the OeNB's subsidiaries or another division within the OeNB for a limited period. In the review year, 63 employees participated in the job rotation scheme; 25 of the job rotation positions were international. The average share of employees on job rotation, which currently stands at 6.5%, is targeted to rise in the future.

The importance of mobility and flexibility is on the rise also at the European level. Staff exchanges between the NCBs and the ECB as well as the increase in cooperative training ventures within the ESCB are evidence of this trend. A significant measure to promote the common understanding of the ESCB is the development of a standardized ESCB basic training program for managers and new staff members within the ESCB. The OeNB's Personnel Division is an active partner in the bodies entrusted with the development and implementation of this program, as the large number of events and seminars organized in Vienna shows. The seminar "Introduction to the functioning of the ESCB," which attracted 36 participants from nearly all EU central banks and received excellent ratings, is a case in point. The seminar series on Basel II, which was developed and is held in cooperation with the Deutsche Bundesbank, as well as the staff training seminar "European Seminar for Executive Secretaries" represent further important training initiatives.

In addition to the development and implementation of numerous training and further education measures within the ESCB, human resources development within the OeNB remains a key responsibility. A permanent priority is to offer customized training and education for management staff. Programs specially designed to meet the needs of different target groups have been implemented.

With its special program to quickly identify and optimally promote high-potential employees, the OeNB aims at ensuring optimum allocation of staff. This program was based on the development of a job specification for future executive staff. The program was introduced in 2005 in the form of a pilot project, and from 2006, it will be used as a standard human resource development tool to promote staff. The OeNB sets great store by high-quality training: the number of average training and education days was reduced in 2005 whereas the number of completed and certified training courses (in-service) was increased.

2.3 Structural Capital

Indicators	Value 2005	Target	Corresponding knowledge goals				Value 2004
			Competence	Confidence	Interdisciplinarity	Efficiency	
Management structure							
Span of supervision	7.5	→				●	8
Number of product managers	75	↘	●			●	69
Technical infrastructure							
Number of IT applications	202					●	196
Availability of ARTIS payment system (%)	99.95	→	●	●		●	99.87
Error-free payment transactions (%)	99.99	→	●	●		●	99.99
Environmental protection and quality assurance							
Number of environmental auditors	12	→				●	12
Number of quality auditors	18	→				●	18
Procurement							
Catalogue orders as a percentage of total orders	38.26	↗				●	37.06
Number of calls for tender	25			●		●	26
Group							
Number of subsidiaries in payment systems services	6		●		●	●	7

To handle its core tasks successfully and efficiently, the OeNB continuously optimizes its organizational processes. Constant monitoring of products and processes ensures optimal management of the resources involved and hence of the entire product portfolio. Some 75 product managers are charged with ensuring the efficient performance of their respective products.

Savings on the procurement side in 2005 were realized above all on the purchase of programming services from external providers. In facility management, the “user pays” principle was used more extensively in 2005 to attribute costs and services accurately. This objective was obtained by billing users for telephone use and energy consumption and attributing security service costs to users with the help of floor space data. In the IT service domain, cost transparency and cost allocation are aimed at supporting the identification and implementation of ongoing improvement measures to enhance IT service performance, availability and quality.

To safeguard stability and security, standards and structures are frequently adapted to take into account technical changes. IT security management provides for the regular review of the efficiency, effectiveness and maintenance of IT security structures and for the development of new standards. As part of the scheduled development of the OeNB’s IT services, platform consolidation made further headway in 2005. With demands on IT systems having risen steadily, hardware at all computer workstations was exchanged in the summer of 2005.



Euro banknotes and coins are in circulation in and beyond the euro area. In 2005 Austria ranked as one of the countries in which banknote inflows exceeded outflows. Consequently, banknote processing volumes also expanded. The OeNB has suitable structures throughout Austria to cope with the greater logistics requirements and the higher processing volumes; seven cash centers operated by GELDSERVICE AUSTRIA handle these tasks for the OeNB.

Following a project to identify possible uses of cash recycling equipment, the OeNB established a Test Center for checking counterfeit detectors, banknote counting and sorting machines, cash recyclers and coin counting machines. After the technical infrastructure for testing had been implemented in 2005, the OeNB's Test Center checked 60 machines free of charge. The test results are available to the public – and especially to interested businesses – via the OeNB's website.² The OeNB is a pioneer among the ESCB central banks in presenting test results to the public. So far, 21 manufacturers and trading companies have had their machines checked at the OeNB's new Test Center. Several manufacturers also use this service for endurance and stress tests.

The sometimes time-consuming reconstruction of damaged banknotes requires highly specialized knowledge. The damaged banknotes submitted range from notes stained by anti-theft devices to remains of decomposed banknotes to burnt banknotes. The OeNB is the authority in charge of deciding about replacement issues. Its decisions are based on the relevant decision of the ECB (ECB/2003/4) and the Federal Act on the Oesterreichische Nationalbank (Nationalbank Act 1984).

Corporate environmental policy was reinforced by the implementation of the EMAS-compliant environmental management system. In the reporting year, 30 environmental controllers attended to various environmental issues and frequently implemented improvements, e.g. of energy consumption. A core feature of the environmental management system is the performance of company environmental audits. The OeNB trained 18 environmental auditors to perform audits at the OeNB.



² http://www.oenb.at/en/rund_ums_geld/testzentrum/oenb_test_center.jsp.

2.4 Relational Capital

Indicators	Value 2005	Target	Corresponding knowledge goals				Value 2004
			Competence	Confidence	Interdisciplinarity	Efficiency	
Cooperation and networks							
Number of days on which the OeNB hosted events	279	→		●	●		288
Number of days on which the OeNB hosted international events	111	↗		●	●		147
Number of national bodies with OeNB representatives	96		●		●		94
Number of international bodies with OeNB representatives	203		●		●		198
Number of technical assistance projects	30	→	●	●	●		30
Number of information visits to the OeNB	126	→	●	●	●	●	96
Number of lectures delivered by OeNB staff	890	→	●	●	●		706
Publications and public relations							
Number of OeNB publications	67	→	●	●			57
Number of papers by OeNB staff published in specialist journals	137	↗	●	●			149
Number of scientific papers by OeNB staff published in refereed journals	49	↗	●	●			42
Number of press releases	162		●	●			170
Number of press conferences	27		●	●			29
Number of inquiries to OeNB hotlines	33,535	↗	●	●		●	33,193
Confidence index (%)	76	→		●			78
Internet-based communications							
Number of page impressions on the OeNB's website (<i>daily average</i>)	56,748	↗	●	●		●	- ³
Number of visits to the OeNB's website (<i>daily average</i>)	5,949	↗	●	●		●	-
Number of newsletter subscriptions	12,834	↗	●	●		●	11,250

The OeNB seeks to maintain and expand its national and international network in order to represent Austria's interests in national and international forums and thus to shape monetary and economic policy developments in Austria and Europe. Good relations with other central banks and international organizations, economic policymakers, academic circles as well as media representatives are important to foster the exchange of expert knowledge and to launch joint initiatives.

The bulk of the work in international bodies concerns contributions to meetings of committees and working groups of the Eurosystem/ESCB and, most importantly, the input of the OeNB's governor to monetary policy decisions within the Governing Council of the ECB. Moreover, the OeNB is represented in numerous European Union (EU) bodies, e.g. by its governor's attendance of the informal Council meetings of the EU finance ministers.

³ Page impressions / visits to the OeNB's website: 2004 and 2005 values are not comparable.



The promotion of central bank cooperation and contributions in line with the European Neighbourhood Policy policy play an especially important role in the OeNB's international work. A twinning project between the OeNB and Magyar Nemzeti Bank, the Hungarian central bank, initiated by the European Commission, serves both of these objectives. One aim of this partnership is the elaboration of a comprehensive communication concept for the introduction of the euro, using targeted, objective communication measures to establish trust in the common currency. Another partnership covering the same topic with Slovakia's central bank is in the pipeline.

Technical assistance reaches well beyond the scope of the countries bordering Austria and enjoys input from all areas within the OeNB. High-level contacts have frequently resulted in targeted consultation and information visits at the expert level. In addition, OeNB officials shared their expertise in 14 seminars and workshops in Austria (primarily at the Joint Vienna Institute⁴) and abroad. A highlight of the OeNB's technical cooperation activities was its contribution to a Tacis⁵ initiative sponsored by the EU and coordinated by the ECB which provided training for about one-fourth of all Bank of Russia officials involved in banking supervision.

The OeNB hosted events on 279 days in 2005, with international participation on 111 of these days. Over 11,600 people participated in OeNB events in 2005, again representing an enormous networking potential. The relationship between monetary policy and financial stability was the central theme of the OeNB's 33rd Economics Conference in May 2005. The Conference on European Economic Integration was organized jointly with the ECB and the Frankfurt-based Center for Financial Studies in November 2005. The OeNB's intense international networking activities are also reflected in the high number of research stays, research cooperation projects and working visits to national as well as international organizations. Quite often, such cooperation feeds into articles published in specialist journals and other economics publications. OeNB staff members published a total of 137 papers and 49 refereed papers in specialist journals in 2005.

OeNB staff held a total of 890 speeches in which they communicated their knowledge and expertise. The audiences were as varied as the topics, which targeted academics and researchers, school teachers and their students, university students as well as the general public. Among the themes targeted at the Austrian public, information about euro cash was again of particular importance. In 2005, 162 press releases were published; in combination with queries and other contacts, they resulted in a total of 1,469 reports in the print media. Confidence in the OeNB remains very high. The number of queries dealt with by the OeNB call center was nearly unchanged at 31,322 requests in 2005. The share of e-mail requests widened from some 22% in 2004 to nearly 31% in 2005.

2005 saw the completion of an information kit for teachers and students aged 14 to 16. This information kit, which explores the topic "Price stability: why is it important for you?", was compiled jointly by the euro area NCBs and the ECB and was presented and distributed within the framework of the Eurosystem's coordinated communication activities. The Money Museum welcomed about 11,200 visitors, 655 (or over 6%) more than in 2004.

⁴ The Joint Vienna Institute is a center which was founded in 1994 to provide training for experts from Central and Eastern European transition countries.

⁵ Technical Assistance to the Commonwealth of Independent States.

2.5 Innovation Capital

Indicators	Value 2005	Target	Corresponding knowledge goals				Value 2004
			Competence	Confidence	Interdisci- plinarity	Efficiency	
Innovation							
Staff resources utilized for innovative projects (%)	15.4		●			●	11.2
Internal R&D expenditure (EUR 1,000)	3,967	→	●			●	3,925
Number of research cooperation projects with external partners	42	→	●		●		38
Number of research visits	1	↗	●		●		3
Number of opinions prepared on economic research promotion	554		●				493

One prerequisite for an optimum product portfolio with maximum utility for customers is the development of innovative products. Organization projects such as organization and process analyses handled in-house support the innovation of tasks and processes. The share of staff resources (full-time equivalents) utilized for innovative projects advanced from 11.2% in 2004 to 15.4% in 2005.

Within the framework of a project to develop a new reporting approach for balance of payments statistics ("Zahlungsbilanz Neu"), preparations were finalized for the change in the reporting system for Austrian external transaction data that entered into force on January 1, 2006. Changes in the international framework made it necessary for the OeNB to switch from recording data on the basis of payment flows within the banking system to direct reporting by economic agents (e.g. enterprises). Modern tools such as the Internet are used for reports to the OeNB. The introduction of reporting thresholds and the use of estimation models as well as calculations by reporting entities themselves have helped reduce the burden on reporting entities. To minimize efforts for reporting entities, synergies inherent in the cooperation with Statistics Austria were expanded, and the use of existing registry and administrative data was promoted. Among other things, an estimation model for major current account components was developed in cooperation with the University of Vienna for use in meeting the monthly reporting requirements of the ECB.

Total Quality Management (TQM) is an approach which covers the quality of products, processes, organization and customer orientation and which aims at introducing quality as a systemic objective and guaranteeing it on a lasting basis. Like all other domains in the OeNB, the Statistics Section applies these principles to all its activities with the aim of steadily improving its service portfolios. To this end, a set of qualitative and quantitative indicators is regularly monitored.



When drawing up valuations of firms, the OeNB checks whether a firm's bank liabilities are eligible. Corporate analysis is a basis for bank refinancing. To assess the potential use of securities for tier 2 refinancing⁶, the OeNB developed a logit model together with the Deutsche Bundesbank to estimate the default probability of enterprises. The pilot project comprises manufacturing enterprises for a start. The discriminatory power tests conducted with the prototype deliver excellent results in the out-of-sample test. The OeNB plans further cooperation with the Deutsche Bundesbank to develop additional logit models for other sectors.

The OeNB bears part of the responsibility for financial market stability within the ESCB. Thus, within the scope of its mandate, the OeNB directs considerable efforts at the establishment of the new capital adequacy framework (Basel II) aimed at further strengthening banking sector stability. Basel II is a complex regulatory framework requiring expertise, a clear understanding of the issues at hand and cooperation by everyone at the national and at the international level. In Austria, a national Basel II secretariat was established for coordination purposes, to which the OeNB contributes its expertise. Moreover, the OeNB is involved in the transposition of the framework into national legislation.

In 2005, the OeNB introduced the IT system BOSS (Bank On-Site Supervision). This system supports the OeNB's bank auditors in drawing up analyses and ensures that the results are represented according to a standardized structure. All information and documentation is stored in a central database, guaranteeing easy retrieval and review for the drafting of the audit report.

In banking supervision, off-site analysis⁷ is being strengthened with a view to organizing personnel resources optimally for on-site inspections. In cooperation with the Vienna University of Economics and Business Administration, the OeNB has developed a method to enable the comparison of ratings of various banks. Complex statistical procedures are used to compare ratings reported in the Major Loans Register. The aggregation of these data makes it possible to identify outliers, i.e. rating systems whose assessments diverge strongly from those of other ratings. Further work in this area will make it possible to assess the quality of rating systems even more accurately.

Cooperation features especially prominently in the field of research. In the reporting year, the OeNB was involved in 42 very important cooperative ventures. The Economic Studies Division has been cooperating closely with the Deutsche Bundesbank and Sveriges Riksbank for many years; recently, it has also teamed up with the Swiss National Bank. In 2005, the OeNB's research and analysis focus on Central, Eastern and Southeastern Europe was once more reflected in cooperative ventures with numerous central banks in the region. Additionally, the OeNB is of course involved in successful cooperation efforts with the ECB. One cooperation highlight is the work on an initiative entitled "Research Project on Financial Modernisation: The performance of the European Financial System."

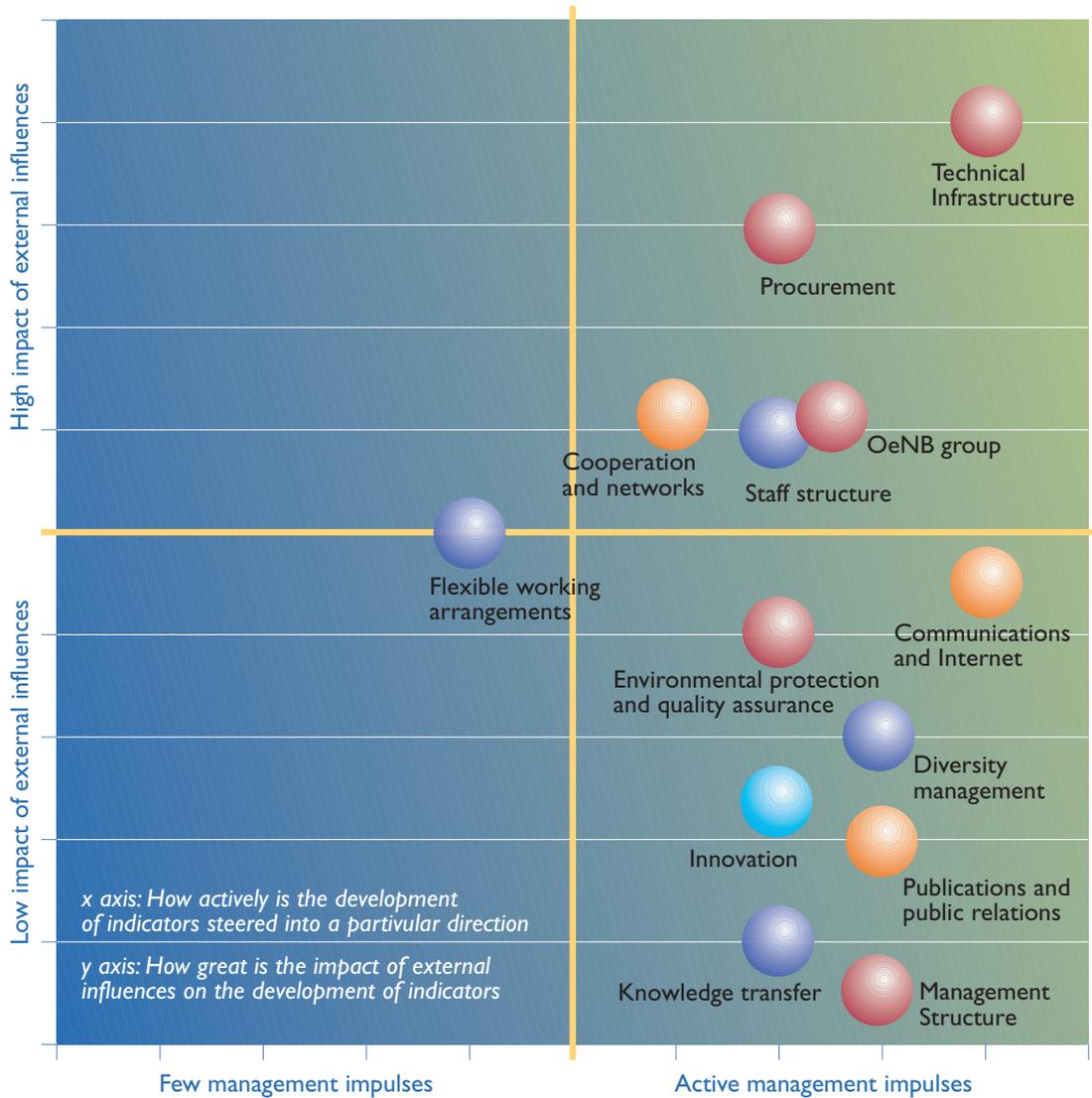
⁶ Specific securities (bank claims) may be refinanced by the OeNB.

⁷ Analysis of banks on the basis of their data reports.

2.6 Management of Knowledge Indicators

The preceding chapters described how targeted management methods contribute to the attainment of specific knowledge goals. Some knowledge indicators are substantially influenced by external factors, while others are hardly subject to outside influences and are therefore easier to advance actively. The chart below illustrates the impact ratio for each indicator:

Influences on the Development of Knowledge Indicators



The degree to which the development of indicators is actively steered into a particular direction (x axis) and the influence of external factors on the development of indicators (y axis) were chosen as criteria for the classification of the indicators. The chart represents a subjective assessment from the OeNB's perspective, but does make it possible to draw some conclusions about the state of indicators.

3 Business Processes and Services

3.1 Business Processes

The OeNB's business processes comprise a multitude of core and support processes. The core processes include preparing and implementing monetary policy, providing the basic information for monetary policymaking and prudential supervision, supplying the economy with cash, participating in prudential supervision, ensuring financial stability as well as engaging in external communication and international relations. The various core processes are interlinked with support processes in many ways. Three examples may be cited to illustrate these links:

- Assessing financial stability in Austria requires input from banking statistics; monetary statistics supply the data needed to prepare monetary policy decisions. Moreover, macroeconomic analyses contribute to assessing financial stability, with the OeNB's Financial Stability Report providing the interested public with important information on the risk profile of the Austrian financial system twice a year.
- The implementation of the Eurosystem's monetary policy strategy requires the analysis and detailed discussion of a wide range of macroeconomic and monetary aggregates at the national level. In addition, staff members from various divisions of the OeNB need to contribute expertise on foreign exchange management, public relations, banknote printing, cash supply, statistics, controlling, accounting, legal aspects and other areas.
- One of the basic tasks of the OeNB is to promote the smooth operation of payment systems. The OeNB does this by monitoring the market and by providing efficient and sound clearing and payment systems. To this end, detailed knowledge about the entire field of cashless payments and an intense exchange of information with legal experts, equity interest management experts, economists, treasury experts and financial market analysis and supervision experts are indispensable.

As these examples show, expertise is increasingly becoming the most important asset. Only the correct application of knowledge can guarantee the successful handling of all business processes. Both the knowledge that is applied in individual business processes and invested in developing these processes further as well as the knowledge about individual business processes, the determinants of these processes and their strategic development are essential in this age of knowledge.





3.2 Services

The services the OeNB renders are part of its entire range of products and services and are at all times performed in line with legal requirements and with the objectives of the OeNB. Some examples of the use of knowledge-based capital are presented below, and additional information about the OeNB's services may be found in the Annual Report.

“I work hard for my money. Good that every euro is worth it.”

To keep the euro's value stable, we need to analyze, look ahead and manage.

To take sound monetary policy decisions, the Eurosystem needs information from all euro area countries. The OeNB, too, provides data and analyses. OeNB economists continuously observe economic developments and price changes. The OeNB publishes a short-term indicator at three-month intervals to provide an economic forecast for Austria. Additionally, it contributes to the Eurosystem staff macroeconomic projections for the euro area.

Furthermore, the OeNB compiles a variety of statistics, such as the balance of payments or money and banking statistics. These economic data about Austria provide crucial information about prices, public finances and other economic indicators. Reliable data and analyses are the basis for the monetary policy of the Eurosystem, which aims at euro stability; economic policymakers, the banking supervisory authorities and international organizations also rely on them.

“I work hard for my money. Good that every euro is worth it.”

It is important for the euro's value to be secure at all times.

Next to implementing monetary policy in Austria, the OeNB handles cash distribution and withdrawal, providing Austrian banks – and thus the general public and the business community – with cash. In 2005 alone, more than 1 billion euro banknotes and more than 1.6 billion euro coins were delivered, processed and sorted, and about 1 billion euro banknotes and over 2 billion euro coins were distributed.

By responsibly investing reserve assets, the OeNB helps avert currency crises and speculative attacks. To be able to assess market developments correctly, the OeNB thoroughly analyzes economic and political developments as well as market participants' behavior. The annual income from the investment of the currency reserves are delivered to the federal government and thus benefit all Austrians. Moreover, the income is used to pay dividends to the OeNB's shareholders and to provide funds for the promotion of research and the arts.



The public is informed about the security features of the euro banknotes by radio, TV, newspapers, brochures and folders. Additionally, professional cash handlers – such as bank clerks or cashiers – are specially trained all across Austria. The training comprises a presentation of the security features incorporating all the steps of the feel-look-tilt test.

“I work hard for my money. Good that every euro is worth it.”

Everybody is entitled to secure money.

In 2005, the OeNB hosted presentations by 17 external partners (multipliers) at the Vienna head office and at least 2 multipliers at each branch office. The presentations were held at the OeNB head and branch office premises. However, if requested, the OeNB also provides on-site training for businesses. In the reporting year, 159 cash training sessions with an average of 50 participants were held in the greater Vienna area. This extensive regime of training courses is quite successful: Austrians are very well informed about the security features of euro banknotes. As a service to the public, the OeNB has established the Eurotour bus as a permanent mobile branch office. The services available from the Eurotour bus include comprehensive information about the euro, the euro security check and the exchange of schilling banknotes for euro free of charge. In 2005, over 104,000 customers visited the Eurotour bus at one of 89 stops.⁸ Some 48,000 visitors received in-depth information about euro security features.

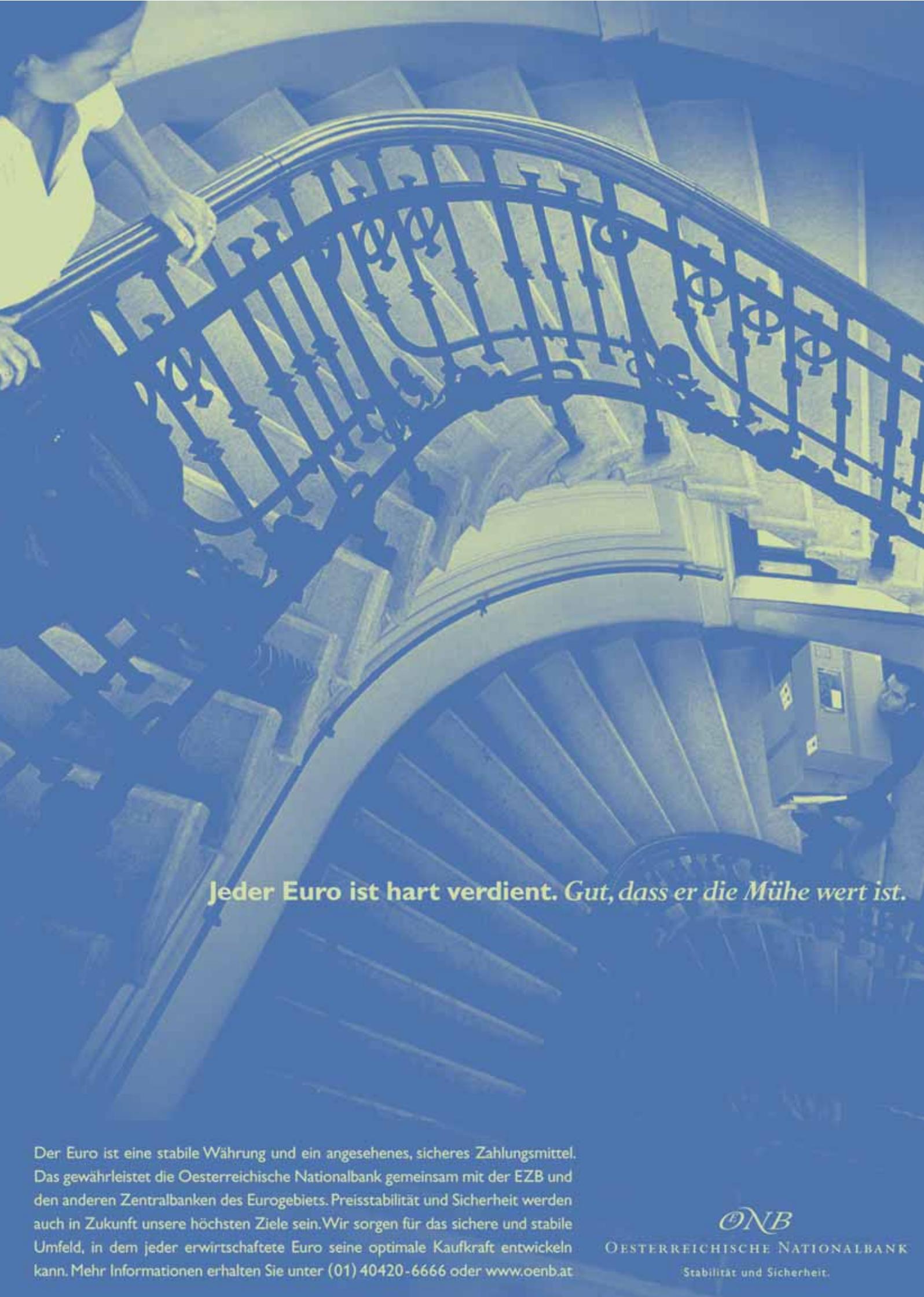
“I work hard for my money. Good that every euro is worth it.”

Financial markets and banks must be stable.

A stable financial and banking system is key to a smoothly operating economy. The OeNB supports the Financial Market Authority (FMA) in preserving financial stability, in particular with the supervision of more than 880 banks in Austria. The OeNB is directly involved in the supervision of banks, it monitors financial markets and it makes certain that legal requirements are met. Basel II, for example, is a modern regulatory framework that makes credit risks easier to assess for banks and businesses. Clear rules, analyses and controls allow for fast identification of undesirable developments and timely corrective measures. The OeNB also oversees payment systems in Austria and, with its semiannual Financial Stability Report, regularly informs experts and the general public about current developments and risks in the financial markets. Moreover, the OeNB represents Austria's interests in international financial institutions.

As the central bank of the Republic of Austria, the OeNB serves the Austrian and European public. With its services, the OeNB's staff shapes financial and economic developments in the interest of Austria and Europe. Such high-quality results can be achieved only through knowledge management and the targeted application of expertise.

⁸ Since the start of the Eurotour campaign in 2002, more than ATS 208.5 million of schilling banknotes were exchanged for euro.



Jeder Euro ist hart verdient. Gut, dass er die Mühe wert ist.

Der Euro ist eine stabile Wahrung und ein angesehenes, sicheres Zahlungsmittel. Das gewahrleistet die Oesterreichische Nationalbank gemeinsam mit der EZB und den anderen Zentralbanken des Eurogebiets. Preisstabilitat und Sicherheit werden auch in Zukunft unsere hochsten Ziele sein. Wir sorgen fur das sichere und stabile Umfeld, in dem jeder erwirtschaftete Euro seine optimale Kaufkraft entwickeln kann. Mehr Informationen erhalten Sie unter (01) 40420-6666 oder www.oenb.at

ONB

OESTERREICHISCHE NATIONALBANK

Stabilitat und Sicherheit.

4 Summary and Outlook

As the OeNB is part of the Eurosystem and the ESCB, it actively contributes to shaping European central banking and central bank policy. Since it is the central bank of a fairly small European country, the OeNB relies particularly strongly on its most important asset – its staff. The flexible use of knowledge-based capital plays an even greater role in the OeNB than in the central banks of bigger countries, which have a much larger pool of employees on which to draw to deal with new challenges. The OeNB therefore sets great store by regularly monitoring its knowledge base by publishing an Intellectual Capital Report next to its Annual Report. With this publication, the OeNB remains a pioneer among central banks. The results of this third Intellectual Capital Report confirm that the OeNB is on the right way – the OeNB took further important steps toward the goal of becoming a “learning organization” in 2005.

By applying its knowledge-based capital in a well-balanced manner, the OeNB once more successfully promoted all four knowledge goals – competence, confidence, interdisciplinarity and efficiency. Austrians’ steady high level of confidence in the OeNB, its services and its expertise and the OeNB’s successful and manifold international networking activities are just two of the signs of this success.

However, the OeNB uses knowledge not just to achieve its own objectives, but passes it on in many ways. As the indicators in this report show, this knowledge transfer operates through many channels – through a wide variety of cooperative ventures, the hosting of visitors from Austria and other countries, lectures or teaching assignments.

To continue and even strengthen knowledge transfers, the OeNB steadily invests in the training and continued education of its staff. Job rotations in Austrian and other institutions serve to foster the success factor “international experience,” which is becoming increasingly important. This factor is also the basis for the continued success with Austria’s networking in many international bodies. A wide variety of innovative projects produces ongoing results that feed into the effective and efficient use of intellectual capital.

For the OeNB, knowledge and the generation of expertise are not just an end in themselves, but are the means to optimally fulfill the manifold tasks of the present and to be well prepared for future challenges. Knowledge and expertise secure the attainment of corporate objectives, which are derived from the applicable legal provisions and the OeNB’s corporate strategy. The accumulated intellectual capital is also a solid foundation for the OeNB’s strategy for 2007 to 2010, which aims at making the OeNB a knowledge-based central bank and puts even greater emphasis on its staff’s role as knowledge workers.



List of Indicators

Indicators	Definition
Human Capital	
Staff structure	
Headcount (year-end)	Staff employed in core OeNB business areas at end-2005
Fluctuation rate (%)	Number of staff members who left the service of the OeNB (excluding retirements) relative to total number of staff
University graduates (%)	Share of university graduates in headcount at year-end
Flexible working arrangements	
Part-time employees (%)	Number of staff members with a part-time contract relative to total number of staff
Staff in teleworking scheme (%)	Number of staff members with a teleworking contract relative to total number of staff
Staff on sabbatical	Staff members who go on sabbatical relinquish part of their pay for a specific period. In return, during this period they may take time off (e.g. to pursue personal training and further education interests and the like) for a period of three or six months.
Diversity management	
Women (%)	Share of women in headcount at year-end
Women in specialist positions (%)	Specialist position: For highly specialized employees, the OeNB not only offers the possibility to pursue a classical career in management, but also to opt for a specialist career which exclusively concentrates on technical expertise and coordination tasks. Indicator: Number of women in specialist positions relative to total number of specialist positions at year-end
Women in management positions (%)	Number of women in management positions relative to total number of management positions at year-end
Knowledge transfer	
Training days per employee (annual average)	Number of days dedicated to training and education relative to average headcount
Training participation rate (%)	Number of staff who took part in at least one internal and/or external training and education course in the reporting year relative to average headcount
Cost of training and education per employee (EUR)	Expenses for training and education (including travel expenses) relative to average headcount
Number of completed and certified training courses (in-service)	Number of staff members who, on their own initiative and mostly outside working hours, completed doctoral programs, postgraduate programs or specialized courses in the reporting year
Number of internal job rotations	Number of staff members who worked in an organizational unit other than their own
Number of working visits to national and international organizations	Number of staff members who worked at the ECB, at other NCBs, EU institutions, the IMF, the OECD or with ministries or OeNB subsidiaries for at least one month
Number of employees with external teaching assignments	Number of staff members who have teaching assignments at universities and/or other academic institutions
Structural Capital	
Management structure	
Staff-to-manager ratio	Number of staff members relative to number of management staff at all levels
Number of product managers	Number of product managers responsible for one or more OeNB products
Technical infrastructure	
Number of IT applications	Number of standard IT applications and in-house software solutions
Availability of the ARTIS payment system (%)	Operating time during which the ARTIS payment system was available
Error-free payment transactions (%)	Number of error-free payment transactions relative to total number of payment transactions
Procurement	
Catalogue orders as a percentage of total orders	Number of orders automatically generated using the e-procurement catalogue relative to the total number of orders placed
Number of calls for tender	Number of calls for tender published pursuant to the Federal Procurement Act (value exceeding EUR 60,000)

Indicators	Definition
Environmental protection and quality assurance	
Number of environmental controllers	Number of staff members serving as contacts for environmental issues
Number of environmental auditors	Number of staff members assessing the effectiveness of the OeNB's environmental management system according to EMAS standards
Number of quality auditors	Number of staff assessing the effectiveness of the OeNB's quality management system according to ISO 9001 standards
OeNB group	
Number of subsidiaries in payment systems services	Number of companies in which the OeNB holds shares and which are active in the cash and cashless payments segments (see also Annual Report)
Relational Capital	
Cooperation and networks	
Number of days on which the OeNB hosted events	Number of days on which the OeNB organized and hosted events (meetings, conferences)
Number of days on which the OeNB hosted international events	Number of days on which the OeNB organized and hosted events (meetings, conferences) with international participants
Number of national bodies with OeNB representatives	Committees and working groups of national organizations whose meetings OeNB representatives attended
Number of international bodies with OeNB representatives	Committees, working groups and task forces of e.g. the ESCB/Eurosystem, EU, IMF, BIS, OECD or of other international organizations whose meetings OeNB representatives attended
Number of technical assistance projects	Number of projects in which the OeNB provided expert technical assistance to other NCBs outside the Eurosystem
Number of information visits to the OeNB	Number of visits to the OeNB aimed at exchanging experience with NCB experts
Number of lectures delivered by OeNB staff	Number of lectures delivered by OeNB staff for external audiences at in-house or external events
Publications and public relations	
Number of OeNB publications	Number of printed OeNB publications
Number of papers by OeNB staff published in specialist journals	Number of nonrefereed contributions published by OeNB staff in specialist journals
Number of scientific papers by OeNB staff published in refereed journals	Number of contributions published by OeNB staff (authors or coauthors) in scientific journals (e.g. Journal of Money, Credit and Banking, etc.) refereed by anonymous referees (peer reviewed journals) and to conference proceedings refereed by anonymous referees (refereed conference proceedings)
Number of press releases	Number of press releases distributed to media representatives
Number of press conferences	Number of events organized for media representatives
Number of inquiries to OeNB hotlines	Number of media inquiries answered by OeNB hotlines
Confidence index (%)	Results of an opinion poll on public confidence in a specific institution (results: fourth quarter of the reporting year) Source: IFES, commissioned by the OeNB
Internet-based communications	
Number of page impressions on the OeNB's website (daily average)	Number of web pages accessed exclusive of references to images, style sheets or script files.
Number of visits to the OeNB's website (daily average)	Number of users who successfully accessed pages on the OeNB website during a specific period. A user may access several pages during a visit.
Number of newsletter subscriptions	Number of subscriptions to OeNB newsletters (econ.newsletter and Basel II Newsletter)
Innovation capital	
Staff resources utilized for innovative projects (%)	Staff utilized for innovative projects relative to total staff
Internal R&D expenditure (EUR 1,000)	Research and development expenditure as defined by Statistics Austria
Number of research cooperation projects with external partners	Research cooperation projects serve to study scientific issues; scientific institutions, universities and the research departments of other NCBs are typical partners for research cooperation projects
Number of research visits	Research visits of at least three months at other NCBs or scientific institutions, mainly for research purposes
Number of opinions prepared on economic research promotion	Opinions prepared by OeNB staff on projects submitted to the OeNB's Anniversary Fund, on applications for loans under the European Recovery Program (ERP) and on applications for changes to ERP loans

Abbreviations

ARTIS	Austrian Real Time Interbank Settlement
BIS	Bank for International Settlements
BOSS	Banking On-Site Supervision
ECB	European Central Bank
EMAS	„eco-management and audit scheme“, Umweltmanagement und Umweltbetriebsprüfung (Umweltaudit)
ESCB	European System of Central Banks
EU	European Union
Eurostat	Statistical Office of the European Communities
FMA	Financial Market Authority
GSA	GELDSERVICE AUSTRIA Logistik für Wertgestionierung und Transportkoordination G.m.b.H. (Austrian cash services company)
IT	Information and communications technology
IMF	International Monetary Fund
JVI	Joint Vienna Institute
OECD	Organisation for Economic Co-operation and Development
OeNB	Oesterreichische Nationalbank
R&D	Research and development
Tacis	Technical Assistance to the Commonwealth of Independent States

