

89

Annual Report



Stiftelsen

RIKSBANKENS JUBILEUMSFOND

The Bank of Sweden Tercentenary Foundation

lev. juni
via 400 st.
300

61.409,-

Annual Report 1989

Contents

1989 in brief	3
Foundation tasks, inception and aims	4
Managing Director's comments	5
Support for research	7
Procedures	7
Research grants	7
Information exchange, follow-up etc.	8
Financial administration	11
Foundation investments	11
Book outcome	12
Real profit	13
Income statement	14
Balance sheet	15
Notes	16
Auditors Report	22
New research projects in 1989	23
Social science	24
Humanities	31
Medicine	35
Natural science	37
Technology	39
Miscellaneous	39
Statistical information on research grants	40
Foundation publications	43
Board of Directors	44
Auditors	44
Office staff	45
(Address, telephone number etc. on rear cover)	46

1989 in brief

- SEK 71 million were distributed in the form of research grants, a 7.6% increase compared to 1988.
- Almost one-third of the approved grants were for new research projects.
- The average grant for the year amounted to more than SEK 300.000 (1988: SEK 260.000).
- Competition for research funds was very intense. Only 11.7% of the grants sought for new projects were approved (1988: 10.1%).
- Research grants increased somewhat more than the general consumer price index. The value of the Foundation's real capital was preserved.
- Two prizes established by the Foundation for the best popular science articles in the magazine *Forskning och Framsteg* (Research and Progress) were awarded for the first time in March 1989.
- An agreement was reached with the *Alexander von Humboldt-Stiftung* on Swedish-German Research Awards for Scientific Cooperation for highlevel German scientists conducting research in Sweden and for Swedish scientists conducting research in Germany.

Foundation tasks, inception and aims

The objective of the Bank of Sweden Tercentenary Foundation is to *support and promote scientific research*.

A central task is to manage the Foundation's assets in such a manner that the economic basis for research support is preserved for the future.

The Foundation was created by a decision of the Swedish Riksdag in April 1962, according to a proposal by the Governors of the Bank of Sweden who wished to commemorate the *Bank of Sweden's 300th anniversary in 1968* while simultaneously supporting "*an urgent national priority*". The yield from the anniversary donation was to be used in support of scientific research related to Sweden.

In its 1964 proposal, the committee appointed to draw up guidelines and regulations for the Foundation recommended that activities should initially

"concentrate on research aimed at expanding knowledge about the impact of technical, economic and social changes on society and on individual citizens".

This recommendation has previously provided and continues to provide guidance on the Foundation's activities.

The Foundation's initial statutes were adopted in December 1964. These statutes, like the present statutes (which came into force on 1st January 1988) stipulated e.g.

"that priority shall be given to research fields whose funding is inadequate in other respects;

that Foundation grants shall primarily be made to major, long-term research projects;

that special support shall be provided for research fields demanding rapid, comprehensive measures; and

that the Foundation shall seek to promote contacts with international research programmes.

The Foundation made its first research grants in October 1965.

From 1965 to 1989, The Foundation awarded more than SEK 800 million (equivalent to about SEK 1800 million in terms of the value of money in 1989) in project grants, travel grants etc. About half of this sum comprised grant to research in the social science field, one-fourth to the humanities and one-fourth to medical, natural science and technical research.

Socially important fields of research lacking particular representative are also eligible for support. Foundation assistance can be viewed primarily as a *complement*, not as an alternative, to resources already available for financing high-level research in Sweden.

Managing Director's comments

Over the years, the Board of Directors have introduced certain clarifications, in addition to the guidelines laid down in the Foundation's statutes. Research projects receiving grants must display a high level of scientific merit, in relation to international standards, and be of major importance to society. All scientific disciplines are eligible for grants.

About 450 new and 150 continuation grants were processed in 1989. The growing number of applications each year has increased the workload for office staff, external experts, committees and the Board of Directors. The projects for which funds are sought are subjected to a stringent quality review before a "short list" can be prepared as the basis for final selection and rulings. Competition for grants is very intense.

Over the past five years, only about one-sixth of applications for new research grants and about 12% of the funds sought could be granted. Many other projects of a high scientific standard and in important fields of research were worthy of support.

Every third year, half of the Board and other members of the Foundation's priority committees conclude their assignments after a six-year tenure. I should like to take the opportunity here of thanking them for a highly stimulating and enriching collaboration. Their devoted efforts have been of great benefit to Swedish scientific research.

Half of the Board and other members of the Foundation's priority committees will be new from the end of May 1989. I have already been able to confirm that the new members possess the same level of knowledgeability and commitment as their predecessors and new colleagues. External experts from various scientific disciplines also place considerable amount of time and know-how at the Foundation's disposal.

Each application for a research grant is therefore guaranteed impartial, expert scrutiny. Thus, projects supported by Foundation grants are all of exceptional merit.

Most routine tasks involved in the processing of applications and grants were computerised during the year so as to improve service to grant applicants and recipients, external experts, members of priority committees and the Board of Directors. The changeover to this new order was remarkably fast and smooth, thanks mainly to efforts by Foundation office staff. Their goal was to learn, relearn and offer good service, something they remind me of every day. So they deserve special mention in this Annual Report.

New Foundation statutes came into force on 1st January 1988. Thereafter, it became possible for the Foundation to pursue more active investment administration. The change has led to a small increase in staff numbers. The reorganization was completed during the year. We now have an effective, high-level organization for the Foundation's two main tasks: support for research and investment administration.

The new investment rules permit virtually any kind of effective, rational investments in shares, bonds, real estate etc. In last year's Annual Report, I described the background to these changes. I also underlined the major, long-range importance of the changes: the Foundation's economic support for Swedish scientific research would be able to retain the same scope in future as in recent years. I still hold the same view.

Two targets, or objectives, have been established for the Foundation's financial activities in the next few years:

- 1) Research grants must be annually incremented by an amount roughly equivalent to the change in the consumer price index.
- 2) As a prerequisite for target no. 1, the Foundation's holdings must be augmented every year from revenue so they retain their real value.

The 1989 income statement and balance sheet (p. 14-15) shows that these targets were met. The consumer price index rose by 6.5% in 1989. Grants for research were increased by 7.6%, and the Foundations's capital holdings were increased by 6.5%. However, we should point out that no expansion in the scope of Foundation activities is envisaged for the foreseeable future. Fluctuations on the financial market, e.g. changes in share prices and bond interest rates, make it absolutely essential for us to transfer revenue to a reserve fund, i.e. a profit regulation fund, in years with high revenue. This will then enable us to make withdrawals from the fund in less profitable years so targets can still be met.

If the Foundation receives a new injection of capital – the new statutes stipulate that donations from companies or private parties may be accepted – the position would obviously change. The cancellation of turnover tax on stocks and bonds (the so-called *valpskatten* or financial-puppet-tax) would also improve our finances. During the year, we paid SEK 12.4 million in tax on the turnover of stocks and bonds, an amount equivalent to 35–40 average-sized research grants (see note 4 on p. 16).

1989 was another interesting and exciting year. Office staff at the Foundation greatly admire all the dedicated work being conducted by scientists at their universities. But we never cease to be surprised by the media's limited interest in the work of serious research. Every time we award a grant, we supply the press, radio and TV with information on ongoing research. We also offer the media opportunities to meet grant recipients. But the media only rarely take us up on this offer.

Growth in the corpus of scientific knowledge is of major importance to a country's cultural and material development. In the long term we are all dependent on the pursuit of scientific knowledge by the best-trained and most suitable people. Being able to supply a small part of the funds needed for this research makes both my colleagues and me feel highly privileged.

Stockholm, January 1990



Nils-Eric Svensson

Support for research

The Bank of Sweden Tercentenary Foundation supports *high-level* research in *all scientific disciplines*. As a rule, this support is in the form of project grants to individual scientists or groups of scientists. In accordance with the guidelines laid down at the Foundation's inception, social science research is favoured to some extent. Priority is mainly given to projects which are not financed in other ways, e.g. through some governmental research council or other authorities, each operating in a relatively narrow sector.

The Foundation is particularly interested in multi- or interdisciplinary research and projects in which scientists from different disciplines, centres or countries collaborate.

Procedures

The Foundation's Board of Directors rules on grants. Before they reach the Board, applications are vetted and evaluated in one or more preparatory committees. Board members and deputy members plus external scientific experts serve on these priority committees. As a rule, applications are also evaluated by one or more experts outside the Foundation.

Each application is evaluated on the basis of intra- and extra-scientific criteria. An application is always weighed in the light of answers to two *main questions*:

- Does it represent high-level scientific research?
- Is the research important to society?

Rulings on grants for *new projects* are made in *two stages*.

- 1) Assessments in the first stage are based on brief, overview applications, i.e. *project outlines*. The committees then select the applications deemed to display the greatest scientific merit and interest from scientists adjudged to be qualified and suitable for the project in question. These scientists are then given an opportunity to submit complete applications. Other applications (project outlines) are rejected.
- 2) In a second stage, *complete applications* are evaluated (usually after vetting by an external expert) prior to a final ruling by the Board.

Applications on research whose ethics are open to question are evaluated according to the same standards and in the same way as in governmental research councils.

In certain fields, regarded as important but inadequately financed, the Foundation sometimes appoints special *sector committees*. The task of these committees is to ascertain research needs, encourage scientific research and promote the exchange of information. These committees consist of scientists from disciplines of significance to the respective field and representatives of important, relevant public interests. Committee activities can be described as high-level research preparatory work. These activities cease when scientists and/or public agencies responsible for allocating permanent resources to the respective field begin devoting sufficient attention to them.

The Foundation also holds *conferences* or *symposia* (occasionally in collaboration with some other research-promotion organization) for the purpose of elucidating the need for knowledge in a particular field and identifying research needs.

Research grants

During the year, the Foundation approved 222 project grants plus travel grants and salary increments etc. amounting to a total of SEK 68.3 million (Table 1, p.41). As a rule, grants were administered by a university or college. The Foundation pays these institutions a 3% fee for administering grant disbursement. SEK 1.8 million in fees were paid in 1989. If the cost of expert vetting and certain information on research projects is added to these figures, the Foundation's disbursements for

research support amounted to SEK 71 million in 1989, a SEK 5 million (7.6%) increase over 1988.

A special section ("New Research Project in 1989", p. 23) below describes all the new projects to which grants were awarded during the year. (In the 1984 Annual Report there was an overview, subject by subject, of all the research projects awarded grants after the start of activities in 1965.)

Awarded grants are utilised according to special provisions stipulated in the contract with each grant recipient and in accordance with Foundation rules for grant recipients and grant administrators. As previously noted, most grants are administered by universities which then serves as the formal employer of staff paid with grant funds.

The section "Statistical information on research grants" (p. 40) lists certain tabular data on processed applications and approved grants.

Nearly one-third of the approved research grants in 1989 were awarded to *new projects* (Table 2, p. 41). Only 12% of the sums sought were approved. The corresponding percentages in the past four years were of about the same magnitude. So competition for grants from the Bank of Sweden Tercentenary Foundation is very intense.

The average size of new grants was somewhat greater in 1989 than in the past few years. The average sum awarded to new projects from 1985–1988 was equivalent to SEK 250.000 if incremented by changes in the consumer price index. The average size of new grants in 1989 was SEK 273.000.

Information exchange, follow-up etc.

Many of the research projects supported by the Foundation shed light on problems of general social interest. So it is important for findings to be disseminated beyond scientific circles so they can even be the subject of lay discussion, critical scrutiny and utilisation.

As a rule, research findings cannot be immediately transformed into practical, concrete action or products. However, they are essential as the starting points for or ingredients in all serious development and reform. For this reason, it is important for people responsible for such activities to be encouraged to seek information, pass it on and utilise research output. They should not merely serve as passive recipients of information on the latest developments. The reverse is also true. The representatives of science should be stimulated in their work by being confronted with the problems as perceived and described outside scientific circles. Organizations supporting research can facilitate this kind of information exchange.

During the year, the Foundation conducted both national and international activities for the purpose of monitoring research receiving Foundation support and stimulating interest in and the exchange of information between different groups on certain problem sectors of society.

For example, the Foundation, in collaboration with the Swedish Academy of Engineering Sciences (IVA), held a series of lectures on the theme "MAN-TECHNOLOGY-SOCIETY". The speakers and their lectures, in the following order, were:

Gunnar Eriksson, History of ideas and knowledge, Uppsala: "Science, society and the scientist's responsibility".

Martin Kyhlhammar, Technology and social change, Linköping: "Authors, technology and society".

Bo Sundin, History of Ideas, Umeå: "The engineer as an organizer".

Boel Berner, Sociology, Lund: "The rule in the exception?".

Louise Walldén, Technology and social change, Linköping: "Technology viewed

through the eye of a sewing machine needle".

Svante Lindqvist, History of technology, Institute of Technology, Stockholm: "The technological landscape".

These lectures were heavily attended and very well-received. They will be published in the Foundation's publication series.

In conjunction with the last lecture at the end of December, the book "SVENSK TEKNIKHISTORIA" (Eng. = History of technology in Sweden) by Jan Hult, Svante Lindqvist, Wilhelm Odelberg and Sven Rydberg (Gidlund Publishing Co.) was presented.

The aforementioned activities were a phase in the Foundation's efforts to promote scientific research and information on the history of technology field. Despite the fact that Sweden has long been a leading industrial nation, the subject has been surprisingly rather neglected as an independent research discipline. With support from the Foundation over the past five years, however, the Royal Institute of Technology (KTH) in Stockholm has been able to enlist a leading U.S. scientist (Thomas P. Hughes) as a guest professor for about one month a year. Interest in the subject has increased markedly, not the least among graduate students. During the year, the KTH established the country's first chair in the history of technology.

The committee for research on the Riksdag's operation and procedures continued its series of lectures for Members of the Riksdag on the subject "Politics and the Work of the Riksdag". Three popular sessions with lectures and subsequent discussion were held in 1989. The lecturers were the former Speaker of the Riksdag, Ingemund Bengtsson and the former party leaders C.H. Hermansson and Gunnar Helén.

The committee also held a joint seminar with its London counterpart, the Study of Parliament Group, at which the forms for research collaboration were discussed.

The international symposium mentioned in the 1988 Annual Report, "The Swedish Riksdag in an International Perspective", was published in the Foundation's publications series (RJ 1989:1).

As in previous years, several of the Foundation's grant recipients were given an opportunity to present and discuss their projects and research findings at foreign institutions of higher learning or at international scientific symposia. As usual, there was also a multifaceted exchange of information with foreign research foundations, especially in Europe. As a result, numerous contacts were established between individual scientists or research groups.

Since 1966, the Foundation has participated in the financing of the Nobel Foundation's symposium programme. This involvement was initially in the form of an annual grant. In 1979 the Nobel Foundation started a special symposium fund with a donation (SEK 2 million) from the Bank of Sweden's Tercentenary Foundation, the Knut and Alice Wallenberg Foundation (SEK 500.000/year for four years) and from contributions and royalties accruing from its own information activities. This fund has developed very favourably and amounted to SEK 45 million at the end of the 1988 fiscal year.

The symposium programme, now completely financed by the yield from aforementioned fund, is led by a committee consisting of representatives of the five Nobel Committees, The Economics Prize Committee, the Bank of Sweden Tercentenary Foundation and the Wallenberg Foundation. The committee is chaired by the Nobel Foundation's managing director.

Approximately 75 Nobel Symposia have been held to date. They are devoted to scientific breakthrough subjects of central cultural or social significance and enjoy a powerful international reputation.

In 1989 the Bank of Sweden Tercentenary Foundation signed an agreement with the *Alexander von Humboldt-Stiftung* on

Swedish-German

Research Awards for Scientific Cooperation

for the purpose of strengthening scientific links between Sweden and Germany.

The funds allocated by the two foundations are intended for distinguished Swedish and German scientists to enable them to pursue one year of research in the other country. German scientists will be chosen by Sweden and Swedish scientists by Germany. The exchange of scientists concerns all disciplines.

Last year, the Foundation established two SEK 25.000 prizes for the two best articles in the magazine *Forskning och Framsteg* (Eng. = Research and progress) in the fields of

Social science – Behavioural science – Humanities
and

Natural science – Medicine – Technology – Agricultural Science

The first prize was awarded in March 1989 to *Lars Einarsson* for the article "Explosion skakar Kronan, 800 man till botten" (Eng. = Explosion rocks the "Kronan"; 800 men perish) and to *Bo Wiman* for the article "Konstärens himlafärger inspirerade fysikerna" (Eng. = The artist's celestial colours inspired physicists).

The prize-winners were selected by members of the Foundation's Board of Directors, in the former instance by Britta Bjelle, Lars Furuland (chairman), Walter Korpi and Margit Sandéhn and, in the latter instance, by Birgitta Hambræus, Ing-Marie Hansson, Jan Erik Kihlström (chairman) and Bengt Pernow.

Attempts to interest the media in the research supported by the Foundation continued. Lists of approved grants and brief, easily grasped descriptions of several projects, offers of assistance in contacting scientists plus other material facilitating contacts are sent to individual news media and press agencies after each grant award. As in the past, however, news media seldom use this material. The Foundation receives virtually no queries from the media.

As in previous years, the preparatory committees also visited a number of grant recipients. In addition to reviews and discussions in conjunction with the individual research projects, the visitors also attempt to obtain knowledge on conditions in and pre-requisites for research and graduate studies.

Scientists or research groups were often invited to the Foundation offices for presentation and discussion of ongoing projects. At Board meetings, scientist members provide periodic reviews of contemporary research work. The aforementioned activities are examples of some of the Foundation's systematic efforts to promote the exchange of information between scientists and society outside scientific circles. As previously noted, the objective is to increase understanding for and knowledge about the prerequisites of research, work procedures and results, thereby supplying the basis for evaluations of the activities financed with available research funds. Meetings at which decision-makers and representatives of various public interests are able to meet with scientists are deemed to be of particular merit.

The Bank of Sweden Tercentenary Foundation is active in *all scientific fields*. This is reflected in the disciplines of scientists on the Foundation's Board and in preparatory committees. Other Board members represent financial and political expertise. The Foundation thereby has a unique position as a multidiscipline intermediary between research and other central public interests.

Financial administration

Foundation investments

As we described in detail in the 1988 Annual Report, the Foundation's financial circumstances have drastically changed.

Since 1988 the Foundation has managed its own financial affairs and is now able to make any kind of investment appropriate to effective capital management. Its capital holdings have also increased considerable.

At the start of 1989, the Foundation's capital amounted to more than SEK 1.600 million and consisted almost exclusively of short-term, interest-bearing assets. The 1988 financial statement reported holdings of SEK 450 million in bonds, but they were also short-term.

The Foundation found it natural to invest capital of this magnitude in both interest-bearing assets (short-term and, mainly, long-term such as bonds) and in shares; real estate will also be an investment object in future. It was also natural for the Foundation to spread investments among Swedish and foreign assets. However, overseas investments must be made with caution and at a measured pace.

Even if there was every reason to be somewhat pessimistic about developments on the Swedish stock market in 1989 (pessimism which turned out to be unjustified), we began expanding our Swedish securities portfolio right from the beginning of the year. We also issued purchase options on some of the Foundation's share holdings. Thus, the Foundation reached agreement with prospective buyers about the sale of these shares when share prices rose above a specified level. Buyers would then utilise their call options. The Foundation would admittedly lose out on any additional rise in share prices. On the other hand, prospective buyers would not be interested in taking up their options if prices fell. These call options "enhanced" the value of the Foundation's share holdings. So issuing purchase options for share holdings provides some hedging against a fall in share prices, a policy suitable for an institution such as the Bank of Sweden Tercentenary Foundation.

At the end of 1989, the Foundation's Swedish share holdings had a market value of SEK 438 million. The Foundation issued purchase options on holdings with a market value of about SEK 80 million.

The Foundation's acquisition of foreign shares started relatively late in the year. At the end of 1989, our foreign share holdings amounted to about SEK 42 million (note 11, p. 18).

In 1989 the Foundation pursued active portfolio management, as reflected in our large brokerage fees, SEK 4.8 million and, not the least, in the large amount of tax paid on the turnover of securities, SEK 12.4 million (note 4, p. 16). Share turnover was a natural consequence of the Foundation's expansion of its share portfolio in 1989. Turnover was also due to some uncertainty about the stability of Swedish share prices. So the Foundation conducted an active trading policy so as to take advantage of rises in share prices.

Capital gains from shares sold were therefore relatively large, about SEK 50 million, whereas unrealised capital gains (a rise in the price of unsold shares) achieved a net value of about SEK 19 million (note 2, p. 16 and note 7, p. 17).

In 1989, the Foundation became a part-owner of an American partnership, i.e. Peachtree Place Partnership which acquired a plot of land in central Atlanta, Georgia. The Foundation's share amounts to about 40%, i.e. SEK 25 million. No other real estate has been acquired. However, the Foundation's relatively large share holdings in Swedish property companies, i.e. about SEK 92 million, can be viewed as indirect acquisition of real estate.

Swedish currency regulations were successively abolished during the first half of 1989. The general view was that Swedish interest rates would therefore drop considerably. When capital movements were unrestricted, the level of Swedish interest rates would be forced to adapt to lower, international levels. But instead the Bank of Sweden pursued a policy which supported, even raised, the level of short-term rates of interest. The result was what is referred to as a "negative yield curve", the level of interest for short-term, interest-bearing securities (treasury discount notes, commercial paper) was higher than the level of interest for long-term, interest-bearing securities (bonds).

The Foundation was sceptical about the likelihood of a falling interest rate. So most of our interest-bearing investments were made in short-term (with a high rate of return) securities, such as commercial paper. However, caution dictated the acquisition of some long-term bonds.

The level of interest and interest structure changed drastically at the beginning of October 1989. At the end of September, the interest on 5-year government bonds was about 11%. During October, November and December, it rose steadily and passed 13% by the end of the year. So the level of interest on bonds rose by about 2 percentage points in only three months.

In that situation, i.e. at the beginning of October, the Foundation began acquiring bonds to a greater extent while simultaneously reducing our previous commercial paper holdings. During the year, the Foundation only acquired bonds issued by real-estate backed institutes, i.e. urban mortgage banks. These bonds must be regarded as completely risk-free. Throughout 1989, their interest rate remained about 0.4 percentage points higher than the interest on government bonds. At the end of the year, the Foundation had nearly SEK 900 million in bond holdings and about SEK 200 million in commercial paper.

Book outcome

The results of the Foundation's investment activities in 1989 are reflected in the Income Statement. The sum of all sources of income, incl. profit/loss on the sale of various securities, minus running expenses, is listed under "Book outcome before allocations and research grants" in the Income Statement. This book outcome (profit) amounted to SEK 193 million.

The biggest income item by far is the Foundation's interest revenue from bank deposits, commercial paper and bonds (SEK 158 million).

Other sources of income were share dividends (SEK 5.3 million) and call premiums received for purchase options (SEK 6.3 million).

Share dividends may seem rather modest. But dividends on Swedish shares were relatively small (on the average about 2% of the market value), and virtually all dividends were paid in the spring. The Foundation only had a share portfolio of moderate size in the spring of 1989.

Revenue derived from Foundation-issued purchase options which proved to be without value (to the prospective buyer) or were taken up by buyers, i.e. who bought shares from the Foundation, is listed as call premiums. When the Foundation bought back previously issued purchase options, the difference between received and paid premiums are reported here. Premiums received for options outstanding at the end of the year are reported on the liabilities side of the Balance Sheet (prepaid call premiums).

SEK 122 million of the annual book profit of SEK 193 million remained after approved grants to research. This amount was transferred in its entirety to the profit regulation fund (note 15, p. 21).

Real profit

From 1989, *real* profit was calculated for Foundation finances. The Foundation's assets, whose yield is included in book outcome, comprises shares, bonds, commercial paper etc., as previous noted, i.e. assets subject to price fluctuations. The Foundation can always elect to either sell securities, thereby converting an asset into a capital gain or loss, or leave securities in the Foundation's portfolio where their value will rise or fall. In the latter instance, an unrealised capital profit/loss then accrues. For any institution working on a long-term basis, such as the Bank of Sweden Tercentenary Foundation, the financial report for any year would be incomplete without an account of unrealised capital profit/loss for its assets. So the Income Statement was supplemented with the value of unrealised capital profit/loss.

The net outcome of unrealised capital profit/loss was a loss of about SEK 35 million during the year. The aforementioned unrealised capital profit on the Foundation's share holdings at the end of the year (SEK 19 million) and an unrealised capital loss (SEK 55 million) on bond holdings are the main reasons for this net figure (note 7, p. 17).

The unrealised capital profit on our share holdings is the difference between the acquisition value of shares and their theoretical market value at the end of the year. The unrealised capital loss on bond holdings was calculated in the corresponding manner. Here, there is reason to discuss the implications of an unrealised capital loss on bonds.

Bonds differ from shares by e.g. bearing a maturity date when the borrower (the bond issuer) buys back the bond at its nominal value. An unrealised capital loss of SEK 55 million on the Foundation's bond portfolio at the end of the 1989 means that the theoretical value of the bonds at that point in time was SEK 55 million lower than their acquisition value. However, if the Foundation does not sell its bonds, irrespective of developments in the rate of interest, it will still recover the nominal value of the bonds when they mature. The nominal value of the Foundation's bond holdings amounted to SEK 970 million, i.e. more than SEK 20 million more than their acquisition value and SEK 75 million more than the market value, on 31st December 1989.

The Foundation does not have any statutory stipulations on capital growth. However, preparatory notes for our existing statutes underline the importance of preserving the real value of our holdings if the Foundation is to be in a position to play a role in future research promotion.

So the Foundation decided to transfer a sum equivalent to the decline in the value of money from 1989 profits to donation capital according to the real statement of accounts. The rate of inflation, measured as an average for the consumer price index in 1989 compared to 1988, amounted to 6.5%. So SEK 97.5 million was transferred to donation capital in order to preserve the latter's real value. On the basis of the market evaluation made for our bond portfolio (and the attendant unrealised capital loss), this sum includes SEK 10.4 million transferred from the profit regulation fund.

The changes in the Foundation's equity capital 1989 after book and real outcome are described in note 15 (p. 21).

Income statement (1.000 SEK)

	Note	1989	1988
Interest revenue	1	157.809	139.744
Share dividends		5.306	—
Option premiums		6.340	—
Realised capital gains	2	51.351	—
Realised capital loss	2	— 3.081	—
Other revenue	3	340	249
Financial costs	4	— 17.514	—
Administration costs	5	— 7.535	— 3.700
<i>Book outcome before allocations and research grants awarded</i>		193.016	136.293
<i>Extraordinary items</i>			
Extraordinary depreciation		—	— 74.900
Transfer from profit regulation fund/donation capital		—	74.900
Research grants awarded	6	— 70.951	— 65.944
<i>Book increase in equity capital after research grants awarded</i>		122.065	70.349
Unrealised capital losses	7	— 34.942	—
Allocation to preserve real value of donation capital	8, 15	— 97.500	—
<i>Real decline in equity capital after research grants awarded</i>	15	— 10.377	—

Balance sheet (1.000 SEK)

	Note	31st Dec. 1989	31st Dec. 1988
		Book values	Market values
<i>Assets</i>			Book values
Cash		56.635	56.635
Commercial paper	9	206.852	206.852
Bonds etc.	10	968.215	916.323
Shares	11	461.198	479.779
Shares in real estate company	12	25.866	25.866
Accrued interest revenue		60.064	60.064
Other receivables		123	123
<i>Total assets</i>		1.778.953	1.745.642
<i>Liabilities and equity capital</i>			
<i>Liabilities</i>			
Pre-paid call premium	13	2.563	4.194
Approved but as yet undistributed grants		45.200	45.200
Other liabilities	14	1.320	1.320
<i>Total liabilities</i>		49.083	50.714
<i>Equity capital</i>	15		
Donation capital		1.500.000	—
Index incrementation of Donation capital		—	1.597.500
Profit regulation fund		229.870	97.428
<i>Total equity capital</i>		1.729.870	1.694.928
<i>Total liabilities and equity capital</i>		1.778.953	1.745.642

Note 10 Bonds etc. 1989

	Nominal value	Book value	Market value
Urban mortgage bank bonds with the following maturity years			
1991	50.000	48.995	47.471
1992	20.000	21.150	18.819
1993	105.000	104.001	98.167
1994	660.000	644.766	606.001
1995	60.000	55.453	54.028
Urban mortgage bank subordinated loans maturing in 1994	75.000	75.000	70.066
Convertibles			
ASEA 12 %, 1985/91	3.318	8.210	10.783
Ericsson 12 %, 1985/92	2.649	8.331	8.479
ESAB 11,25 %, 1987/93	1.004	2.309	2.509
	976.971	968.215	916.323

At the end of 1988, the Foundation's bonds, exclusively urban mortgage bank bonds, had a book value of SEK 448.745.000 (nominal value SEK 450.000.000).

Note 11 Share holdings 1989

Share	Number	Nominal value	Book value	Market value	Unit of currency
Swedish shares					
AGA B unrestr.	136.800	3.420	34.212	32.285	
AGA B restr.	15.000	400	3.627	3.480	
Aritmos restr.	100.000	1.000	16.800	16.100	
Aritmos unrestr.	2.800	28	448	451	
ASEA A restr.	66.300	3.315	41.894	47.073	
Astra A restr.	101.250	2.531	29.792	39.488	
Atlas A unrestr.	53.700	1.342	15.615	15.519	
Atlas B restr.	60.894	1.522	17.322	17.598	
Ericsson B unrestr.	79.912	1.997	51.602	70.323	
Esselte B restr.	10.000	125	2.300	1.780	
Gambro restr.	4.900	98	575	637	
Hasselfors B restr.	20.000	500	4.800	4.900	
Klövern A restr.	165	3	56	55	
Klövern B unrestr.	1.700	34	502	510	
Klövern B restr.	23.710	474	7.330	7.113	
Modo KVBC	30.500	3.050	10.959	7.320	

Share	Number	Nominal value	Book value	Market value	Unit of currency
Swedish shares					
Perstorp B restr.	45.000	450	12.825	10.575	
Procordia A restr.	50.000	1.250	7.850	7.250	
Regnbågen A restr.	28.300	707	8.631	7.924	
Regnbågen A unr.	2.700	67	832	742	
Regnbågen B restr.	15.350	383	4.785	4.298	
Reinhold city	80.000	1.600	9.040	8.800	
Reinhold syd	10.000	100	980	1.140	
SEB A restr.	50.000	500	5.318	4.550	
SKF B unrestr.	102.900	1.286	16.064	16.155	
SKF B restr.	92.600	1.157	13.644	12.408	
Skanska B restr.	110.000	1.100	60.491	60.940	
Skoogs B restr.	25.400	508	3.045	3.073	
SSAB B unrestr.	50.000	5.000	8.378	8.150	
Stora A restr.	23.700	592	8.059	7.442	
Stora B unrestr.	49.700	1.242	19.879	15.656	
Åkermans B restr.	18.000	450	3.312	3.996	
Total Swedish shares			420.967	437.731	SEK
Foreign shares					
Smith Corona	50.000	0,5	900	662	USD
Pfizer	10.000	1	745	692	USD
ASIT	500.000	125	492	480	GBP
ASIT subscr. option	100.000	—	—	26	GBP
BASF	4.900	245	1.376	1.470	DEM
Commerzbank	5.200	260	1.396	1.560	DEM
Deutsche Bank	4.000	200	2.752	3.372	DEM
Hoesch	5.000	250	1.402	1.405	DEM
Total foreign shares			40.231	42.048	SEK
Total shares			461.198	479.779	SEK

The final buying rate was used when the market value was calculated for shares. In the conversion of the value of foreign shares to Swedish kronor (SEK), the banks' buying rate for the respective currency on the last bank business day in December was used.

Note 12 Shares in property companies

In 1988, the Foundation became a part-owner (partner) of an American partnership, Peachtree Place Partnership, which has acquired a plot of land in central Atlanta, Georgia. The Foundation's share of invested capital amounts to 40%, i.e. US\$ 3.987.928. The sum is reported in the financial accounts as SEK 25.866.000.

Note 13 Pre-paid option premiums in 1989

Underlying share	Retirement price	Retirement date	No. of shares	Book value of premiums received	Market value of options
ASEA B restr.	680	Feb. 90	30.000	450	1.350
ASEA B restr.	720	Feb. 90	5.000	90	115
Astra A restr.	340	Feb. 90	33.900	333	1.763
Atlas A unr.	310	Feb. 90	11.000	67	55
Ericsson B unr.	880	Feb. 90	5.000	195	130
Ericsson B unr.	900	Jan. 90	25.000	774	400
Ericsson B unr.	900	Apr. 90	5.000	325	325
SEB A restr.	110	Jan. 90	17.000	55	7
SEB A restr.	120	Jan. 90	8.000	48	1
Skanska B restr.	570	Jan. 90	12.000	226	48
Total premiums for issued purchase options				2.563	4.194

The purchase options issued for shares in the Foundation's portfolio had a total sales price of SEK 80.006.000. The book value of these shares amounted to SEK 67.148.000.

Note 14 Miscellaneous liabilities

	1989	1988
Employee taxes withheld	89	73
Compulsory employee saving	3	—
Payroll overhead	120	—
Unutilised vacation	42	—
Other accrued costs	68	25
Purchased but as yet unpaid securities	999	—
	1.320	98

Note 15 Equity capital**Nominal capital**

	Donation capital	Profit regulation fund
Equity capital on 31 Dec. 1988	1.500.000	107.805
This years allocation	—	122.065
Equity capital on 31 Dec. 1989	1.500.000	229.870

Real capital

	Donation capital	Profit regulation fund
Equity capital on 31 Dec. 1988	1.500.000	107.805
Allocation to preserve the real value of donation capital	97.500	—
Real decline in equity capital after approved research grants	—	—10.377
Equity capital on 31 Dec. 1989	1.597.500	97.428

Stockholm 9th February 1990

Kjell Härnqvist
Chairman

Lars Svensson
Deputy chairman

Britta Bjelle

Barbara Cannon

Birgitta Hambræus

Berit Löfstedt

Lennart Holmström

Arne Kjörnsberg

Walter Korpi

Lars Tobisson

Jarl Torbacke

Sten Wikander

Nils-Eric Svensson
Managing Director

Auditors Report

We have audited the Annual Report, Foundation accounts and the administration by the Board of Directors and Managing Director for the year 1989. The audit was carried out in accordance with accepted auditing practices.

The audit disclosed nothing warranting any criticism of the Annual Report, Foundation accounts or the administration by the Board of Directors and Managing Director of the Foundation's affairs. In our view, the accounts provided a true picture of the Foundation's financial position and were prepared in accordance with accepted accounting practices.

Stockholm, 13th Februari 1990
Hagström & Olsson AB

Per Björngård
Chartered Accountant

New research projects in 1989

Pages 24–39 below contain summaries of project plans for the new research projects which were the recipients of Foundation grants in 1989.

The texts were written by the scientists themselves and taken from the "Summary of the project's objectives, importance and implementation" section of grant application forms.

The project titles were selected by the scientists and taken from the grant application forms.

Economic history

Mats Essemyr, Uppsala

SEK 50.000

Dno.: 89/69 PL

Evolution of fortunes in Sweden in the 20th century

The aim of the project is to examine the evolution of Swedish fortunes in the 20th century. The examination will comprise an empirical study of the period from 1982–1987 and a comparison with studies from earlier periods.

Anita Göransson, Umeå

SEK 300.000

Dno.: 89/160

On the growth of the Swedish bourgeoisie from 1780–1880

The project will study the demographic, economic and political importance of the growing bourgeoisie's social gender system. What effect did the formal subordination of women have on capital formation and commercial developments.

Business administration

Per Olof Berg, Lund

SEK 500.000

Dno.: 89/117

Commercial Demands and Ideological Roots – A comparative study of banks in transition

The project will entail a comparative study of six banks to determine the effect of two development trends in the way banks are managed and operated on the market. Data will be collected through questionnaires and research shops.

Göran Widebäck, Lund

SEK 240.000

Dno.: 89/118

Operational logic in Swedish public health

The project views Swedish public health as a sector whose conditions will be analyzed on the basis of current, relevant theory and case studies. The analysis will result in a reference system clarifying development options open to Swedish public health.

Jan-Erik Gröjer, Stockholm

SEK 50.000

Dno.: 89/230 PL

Company acquisitions

The objective of the reserach programme is to produce a theoretical and empirical description of the factors underlying the value of a company at the time of acquisition.

Jan-Erik Vahlne, (IIB) School of Economics

SEK 530.000

Dno.: 89/376

The EC in the 1990's and Swedish industry

The study comprises three projects, one including a sub-project. The aim of all the projects is to generate results of relevance to enterprises and organizations which are directly affected by harmonisation work in the EC.

Economics

Peter Bohm, Stockholm

SEK 400.000

Dno.: 89/102

Experimental Economics—Theory testing and policy evaluation

The project will create a research unit for experimental economics. Its task will be to test central assumptions in economic theory, evaluate different economic and political measures, compare results of experiments with empirical information from other sources and comment on experiments performed.

Alfred Kanis, Stockholm

SEK 520.000

Dno.: 89/360

QUEMOS—A macroeconomic model for Sweden

The aim of the project is to devise an econometric model for the Swedish economy and to use it for the analysis of disruptions to economic cycles and economic and political measures.

Cultural geography

Kajsa Ellegård, Göteborg

SEK 175.000

Dno.: 89/139

The Composition of Everyday Life—a method development study

This project intends to develop a temporal, geographic instrument for the study of the way people use time. The emphasis will be on recurrent activity sequences and on disruptions in the activities of everyday life.

Ian Layton, Umeå

SEK 330.000

Dno.: 89/247

The geographical evolution of the demand for and supply of coniferous forest products within Britain and northern Europe from about 1700 to the present day—economic expectations or knowledge diffusion?

The project intends to reinterpret the significance of different processes and mechanisms leading to changes in forestry in northern Europe and to provide a geographical analysis of spatial utilisation of forestry resources.

Education**Academia Europaea,****SEK 500.000**

Dno.: 89/435

Education in the Modern World: The European perspective

A project group, chaired by Prof. Torsten Husén and with prominent members from Belgium, France, Germany, Great Britain and Hungary, will study the operation of the educational system in a number of European countries with respect to objectives, functions, organization, costs and results.

Psychology**Sven-Åke Christianson, Umeå****SEK 270.000**

Dno.: 89/9

Neuropsychological studies of memory in healthy children and in children receiving surgery for epilepsy

The project's intention is to study the development of and relationship between different memory functions in children and to examine the way in which children's memory functions interact with other capabilities, such as perception, motor development, language and emotions.

Stig Berg, Göteborg**SEK 185.000**

Dno.: 89/150

Psychological Function During Ageing: A longitudinal study of the period from 70 to 85 years of age

This subproject within the framework of H 70 will describe psychological development from the age of 70 and relate this to disorders, social conditions etc. The emphasis will be on functions such as intelligence, memory, life satisfaction and adaptation.

Alf Gabrielsson, Uppsala**SEK 250.000**

Dno.: 89/163

The Perception of music and musical communications

This project will examine three inter-related issues in musical communications, i.e. deep musical experiences, communication between composers and listeners and expression and execution.

Edith Mägiste, Stockholm**SEK 110.000**

Dno.: 89/226

Stockholm's Inhabitants: School performance and socioemotional adaptation

The aim of the project is to examine the performance and emotional development of second-generation immigrants in relation to the domestic population. The investigation will offer a unique opportunity to study certain important factors governing the position attained by individuals in society.

Gunn Johansson, Stockholm**SEK 350.000**

Dno.: 89/296

Language proficiency and stress

This project will seek to identify and analyze factors making inadequate language proficiency a stress factor and to devise a model as the basis for field studies.

Mikael Heimann, Göteborg**SEK 100.000**

Dno.: 89/313 PL

Imitation in Children from 0–3 Years of Age—Its importance to early socioemotional development

This study will examine the way in which individual differences in imitative ability evolves during the initial years of life and the way in which this process is related to concomitant emotional and cognitive development.

Sven G. Carlsson, Göteborg**SEK 250.000**

Dno.: 89/315

Psychological and social profile (PSP) in the rehabilitation of adults with hearing defects

The project will develop a standardised questionnaire for use in obtaining a "psycho-social profile" (PSP) for each patient treated for a hearing defect and to frame guidelines for identifying patients in need of psychological treatment. It will also test cognitive group therapy for patients identified with a PSP.

Adrian Parker, Göteborg**SEK 75.000**

Dno.: 89/362 PL

Psychological factors in paranormal experiences

The present project, with roots in earlier clinical research and the debate in trade journals, will collect data on the relevance of two models for explaining paranormal experiences and belief in the occult.

Aila Collins, Royal Caroline Institute**SEK 350.000**

Dno.: 89/408

The Health of Women: A prospective study of premenopausal women

The overall objective of the investigation, employing a longitudinal study, is to analyze the correlation between biological, psychological and psychosocial changes in premenopausal women.

Sociologi**Ingrid Jönsson, Lund** SEK 75.000

Dno.: 89/99 PL

Education, occupation and family life

The project will attempt to increase understanding about why and how young women and men with different social backgrounds reinforce or change their educational ambitions during upper secondary school and how this affects occupational and family circumstances by the time they reach the age of 25.

Eva Bernhardt, Stockholm SEK 275.000

Dno.: 89/176

Children's chances of survival in Stockholm from 1878–1926

This project will examine the factors and processes underlying the uncommonly rapid improvements in the survival prospects of Stockholmers at the end of the 19th and beginning of the 20th century.

Göran Therborn, Göteborg SEK 250.000

Dno.: 89/260

The Authorities and the Good Society—Campaigns

The project, part of the "Social styrning och faktisk samhällsutveckling", will be examining social and health policy campaigns in Sweden. A major question is how campaigns have changed over time and the extent to which social developments have influenced these changes.

Gunnar Olofsson, Lund SEK 300.000

Dno.: 89/308

The State, the Companies and Older Employees—a study of company strategies in respect to employee age profiles

A main aim of the project is to examine how companies deal with the age profile of their work force, older employees in particular, and the interplay between the external system of rules and internal rules practiced within the companies.

Anthropology**Göran Aijmer, Göteborg** SEK 400.000

Dno.: 89/387

Changes in Rural China in the 1980's: an anthropological view of developments

The project will examine changes and change processes in rural areas of the People's Republic of China in the 1980's. Detailed documentation will be procured on three different regions.

Statistics**Claes-M. Cassel, EFI** SEK 100.000

Dno.: 89/209

More reliable forecasts and micro-based analyses of time series

The aim of the project is to investigate the extent to which forecasts with time series can be improved by taking into account the possibility that data may be afflicted by selection errors.

Political science**Gunnar Wallin, Stockholm** SEK 450.000

Dno.: 89/82

Elite attitudes and social changes in western democracies

This project will constitute the Swedish part of a renewed, comparative study of the political culture of administrative and political elites in western democracies. The previous Swedish part of the programme was conducted at the beginning of the 1970's.

Christer Jönsson, Lund SEK 350.000

Dno.: 89/83

AIDS, transnational network and international collaboration

The project will investigate opportunities for and limitations in international collaboration. One specific example will be used: international efforts in the fight against AIDS.

Stefan Hedlund, Uppsala SEK 500.000

Dno.: 89/112

Environment and society in the Soviet Union

This research project will be a one-year, explorative study for the purpose of documenting and evaluating environmental events in the Soviet Union, identifying research fronts there and acquiring new knowledge.

Barry Holmström, Uppsala SEK 140.000

Dno.: 89/136

Courts and Democracy: The European Court and constitutional policies in Sweden, Great Britain, France and West Germany

The project will shed light on fundamental issues concerning the balance between democracy vs. justice, national sovereignty vs. the rights of the individual and "law" vs. "politics".

Bengt Sundelius, Stockholm**SEK 188.000**

Dno.: 89/225

A small country in Crisis: Sweden and U 137

The U 137 submarine incident in October 1981 will be studied in the light of crisis management theory. Swedish behavior in making twelve crisis decisions will be analyzed.

Roger Henning, FA Council**SEK 200.000**

Dno.: 89/312

Islands of Growth—a study of business internationalization

The aim of the project is to study relationships between "islands" of growth (in Sweden and Europe) and other regions and the impact of political decisions on this growth.

Anders Malmberg, FA Council**SEK 225.000**

Dno.: 89/319

Internationalization and regional work distribution

This programme is one of seven sub-projects in the FA Council's "Internationalization, enterprises and the local community" programme to which scholars from several social science disciplines will contribute. It will analyze changes in the regional distribution of work.

Law**Staffan Westerlund, Uppsala****SEK 200.000**

Dno.: 89/432

Transnational disruption of the environment caused by activities in Sweden

This will be an initial study of basic matters related to the interface(s) between standards of international and national law of relevance to the environment. The assimilation and implementation of different standards will be studied.

Humanities**Bengt Edlund, Lund****SEK 120.000**

Dno.: 89/34

Musical continuation

The project, utilising an analysis section and an empirical-experimental section, will study various aspects of music structure phenomenology.

Per Linell, Linköping**SEK 260.000**

Dno.: 89/44

Contact through an Interpreter. A project on language interpretation, an increasingly common form of communications in the public sector

The aim of the project is to shed light on the interpreted conversation as an instrument for communication and describe/explain opportunities and difficulties in such conversation.

Susanna Åkerman, Uppsala**SEK 205.000**

Dno.: 89/53

The Swedish-Baltic Contribution to Early Age of Enlightenment Deism—materialism and immaterialism in European thinking from 1621—1688

The project will attempt to describe the background to contributions by Johannes Gezelius the Younger to von Rosenroth's edition of the Jewish "Kabbala Denudata" (1674), a work with a great influence on Leibnitz.

Rolf Pålbrant, Uppsala**SEK 255.000**

Dno.: 89/61

Dependency of Swedish cycling and skiing sports on technical and economic developments in the 20th century

The aim of the project is study and analyze technical developments in Swedish cycling and skiing sports and underlying economic forces in the light of social changes.

Christer Winberg, Stockholm**SEK 250.000**

Dno.: 89/64

Regional differences in Swedish social development

This project will attempt to determine how far back regional difference in 19th century Sweden can be traced, published statistics not usually available before 1810.

Thorleif Pettersson, Uppsala**SEK 860.000**

Dno.: 89/68

Swedish and European Value Systems: round two of the EV SSG study

The project will involve Swedish collaboration in the second round of the international "European Value Systems Study Group" study, an interview investigation of values and opinions.

Milan Bily, Lund**SEK 280.000**

Dno.: 89/106

The Russian morphological case and its semantics

The aim of the project is to attain a scientifically stringent description of the Russian morphological case and its semantics plus a revision of Hjelmlev's and Jakobsson's theories and case descriptions in the light of subsequent critical objections.

Gösta Bruce, Lund**SEK 210.000**

Dno.: 89/107

Spoken communications in the deaf, perception and mood transmission in particular

The project will examine the acoustic clues people use in conveying different moods and how hearing defects affect the perception of these clues. Knowledge gained will be employed in devising a voice and speech therapy programme for people with defective hearing.

Göran Rystad, Lund**SEK 400.000**

Dno.: 89/123

Meeting Foreigners. Problems in the reception of refugees and cultural confrontations

The project's objective is to analyze xenophobia and other attitudes and reaction during encounters between different ethnic groups, primarily between refugees and immigrants, on the one hand, and the host population, on the other hand.

Bo Bennich-Björkman, Uppsala**SEK 350.000**

Dno.: 89/203

The spread of books in Sweden from 1750–1829

This one-man project, which will last for 3 years, entails an analysis of the way the system for commercial book dissemination operated in Sweden from 1750–1829.

Aleksander Loit, Stockholm**SEK 500.000**

Dno.: 89/210

Baltic-Scandinavian economic relations from 1918–1940

The main purpose of the project is to study the economic scope of relations between Baltic countries and Scandinavia in the period when Estonia, Latvia and Lithuania were politically sovereign states.

Boel Westin, Stockholm**SEK 235.000**

Dno.: 89/233

Strindberg's "Fairy-tales"

This project will comprise an analysis of the text in Strindberg's "Fairy-tales" (1903), a work largely neglected by earlier research on the author's output.

Ebba Witt-Brattström, Stockholm**SEK 235.000**

Dno.: 89/255

Writings on the Feminine Experience—excursions in literature written by Swedish women

The aim is to depict the work of eight female authors active over a period of 600 years and describe the contours of women's literary traditions, examining issues such as the language used, the female identity, themes recurring over the centuries etc.

Ingrid De Geer, Göteborg**SEK 250.000**

Dno.: 89/303

Music Culture and Immigration. Traditions, transformation, assimilation. Regional project in Värmland

The aim of the project is to examine the music traditions, music usage and music activities of immigrants and refugees in Värmland county with the aid of a systematic inventory and investigation.

John Rogers, Uppsala**SEK 50.000**

Dno.: 89/337 PL

Struggle for a Better Life. Public health boards and early health and environment policies in Sweden

By processing various source materials in Stockholm, Göteborg and a number of other Swedish towns, this project will ascertain the contributions made by boards of public health to reductions in morbidity and mortality.

Ingvar Svanberg, Uppsala**SEK 240.000**

Dno.: 89/401

Islamic Fundamentalism or Ethnic Contra-acclurization. A study of the Süleymanli Movement in Europe and Sweden

This study will study the history, spread and popularity of the fundamentalist Süleymanli movement among Turkish immigrants in Europe.

Erling Wande, Stockholm**SEK 400.000**

Dno.: 89/410

The two languages of Sweden's Finnish Immigrants—linguistic use and attitudes in two generations

The project will study the results of linguistic contacts between Swedish and Finnish in Finnish immigrants in the Stockholm region from a dialectological and socio-linguistic point of view.

Börje Westlund, Royal Library**SEK 300.000**

Dno.: 89/417

The Hammarskjöld Archives in the Royal Library

The project will examine, arrange and list, for the benefit of subsequent investigators, the files of four members of the Hammarskjöld family, viz. Hjalmar H. and his three sons Bo, Åke and Dag, stored at the Royal Library. The Dag Hammarskjöld documents concern his public service before 1953.

Medicine**David H. Ingvar, Lund****SEK 400.000**

Dno.: 89/43

The effect of alcohol on will, as studied through measurements of activity in the cerebral cortex

The initial phase of the study will perform examinations of healthy, young patients at rest and during activation while sober and after rapid alcohol intake. Chronic alcoholics will be studied in a subsequent phase.

Olle Hagnell, Lund**SEK 200.000**

Dno.: 89/71

Incidence of Mental Illness over 25 years; course and holistic view

The purpose of this study is to describe the mental illness observed in a normal population of 2550 people studied for 25 years.

Kerstin Tunving, Lund**SEK 300.000**

Dno.: 89/200

The social impact of hidden narcotics abuse from a public health perspective

The project will examine a number of public health issues related to hidden narcotics abuse, such as morbidity, HIV prevention and public health consumption. A sub-study will evaluate Lund's free syringe programme, a subject of international importance.

Jan-Åke Gustafsson, Royal Caroline Institute**SEK 250.000**

Dno.: 89/224

Mutagens Formed in Fried Foods—An interdisciplinary study of formation mechanisms, structures and health hazards

The aim of the project is to obtain data making it possible to estimate the risk of contracting cancer after exposure to mutagens formed in fried foods. The project will be conducted on an interdisciplinary basis.

Bengt Winblad, Royal Caroline Institute**SEK 300.000**

Dno.: 89/245

Genetic and molecular biology studies of families with members suffering from Alzheimer's disease

Our goal is to study a number of large families and to follow inheritance patterns through several generations. DNA obtained from members of these families will be analyzed in the search for a link between chromosomal fragments and Alzheimer's disease.

Jörgen Boivie, Linköping**SEK 200.000**

Dno.: 89/251

Studies of central pain

The aim of the project is to increase knowledge about the mechanisms and clinical manifestations of central pain and to apply that knowledge in the search for better and more effective treatment.

Sten-Magnus Aquilonius, Uppsala**SEK 250.000**

Dno.: 89/363

Clinical reserach on Parkinson's disease

The individual patient's degeneration pattern in the brain will be characterised with positron emission tomography and other analysis methods used for studying Parkinson's disease and the effect of medication.

Per Björntorp, Göteborg**SEK 260.000**

Dno.: 89/394

Studies, using a new marker of alcohol intake, of alcohol's damaging effects

The aim of the project, employing a newly developed biochemical marker of alcohol consumption, is to elucidate the correlation between alcohol intake and social consequences, morbidity and mortality in forensic contexts.

John Wahren, Royal Caroline Institute**SEK 250.000**

Dno.: 89/418

Development of methods for non-invasive study of liver metabolism in Man

The project will attempt to develop non-invasive methods for studying liver metabolism in Man and will comprise three sub-studies.

**Gustav Dallner/Krister Kristensson,
Royal Caroline Institue****SEK 250.000**

Dno.: 89/426

Neurodegenerative Diseases. The significance of membrane lipids and membrane changes

The aim of the project is to acquire knowledge, by means of systematic study, and to define, using objective cytobiological, biochemical and biophysical methods, normal ageing and different types of neurodegenerative conditions with dementia.

Natural science**Nils Mårtensson, Uppsala****SEK 250.000**

Dno.: 88/394

Catalysis research using electron spectroscopic methods and synchrotron light

In interdisciplinary studies, the project will utilise e.g. unique opportunities for electron spectroscopic measurements of the surface properties of materials.

Olof Leimar, Stockholm**SEK 195.000**

Dno.: 89/51

Theoretical aetiology

The aim of this completely theoretical project is to use evolutionary game theory and decision theory in developing methods for studying the evolution of behaviour.

Olof Tottmar, Uppsala**SEK 200.000**

Dno.: 89/126

Aggregation culture of brain cells as an experimental model in neurotoxicological research

The project will use aggregation cultures of rat brain cells as an experimental model for studies of the toxic effect of alcohol and different environmental pollutants on the central nervous system.

Sven Blomqvist/Carl-Gustaf Elinder, Stockholm**SEK 200.000**

Dno.: 89/183

Cadmium and other metals in the antarctic marine pelagic environment—a project in the 1988/89 Swedish Antarctic Expedition

The 1988/89 Swedish Antarctic Expedition will study the metabolism, accumulation and effects of toxic metals in a virgin eco-system.

Hans Siegbahn, Uppsala**SEK 275.000**

Dno.: 89/190

Properties and processes at the surface of fluids

The project concerns studies of the physics of fluids, especially with respect to interfaces with other phases, and will examine the properties of free fluid surfaces and of the contact zone between fluids and solid materials.

Christer Löfstedt, Lund**SEK 300.000**

Dno.: 89/359

Evolution of pheromonic communications in butterflies

A broad-based study will examine a number of ecological and evolutionary processes related to the pheromonic communications of butterflies and identify underlying biological/chemical mechanisms.

Arne Lundberg, Uppsala**SEK 150.000**

Dno.: 89/389

Genetic analysis of kinship in natural avian populations

The project will utilize DNA fingerprints in determining the success of different avian reproductive systems.

Technology**Peter Michael Fischer, Göteborg and Chalmers Institute of Technology****SEK 100.000**

Dno.: 89/78 PL

Life environments in the past and present (Spin-off project: a new dating method)

This project will attempt to provide answers to questions about changes in the life environment over the past 5000 years by studying environment-related trace elements in the teeth of archeological specimens.

Anders Askenfelt, Royal Institute of Technology**SEK 210.000**

Dno.: 89/222

The physics of piano and violin strings

The aim of the project is to study events when vibration is induced in the strings of two instruments, i.e. the piano and violin, especially the way the inherent properties of the piano hammer and violin bow respectively affect these vibrations and, hence, instrument tone.

Arne Risberg, Royal Institute of Technology**SEK 300.000**

Dno.: 89/223

Phonological rules in the speech of deaf people

This project will examine various systems of rules governing the speech of the deaf with special emphasis on phonological rules.

Miscellaneous**Collaboration with the Alexander von Humboldt-Stiftung****SEK 500.000**

Dno.: 89/263

Allocation for the exchange of scholars between Germany and Sweden.

Statistical information on research grants

The following tables provide an overview of the allocation of grants to different subjects in 1989 (Table 1) and for the entire period in which the Foundation has been in business, i.e. from 1965 to 1989 (Table 4). If the grants awarded in the various years are expressed in terms of the value of money in 1989, the Foundation's research grants to date amount to about SEK 1800 million.

Information on the relationship between continuation grants and new grants in 1989 will be found in Table 2. Table 3 indicates their life.

Many of the projects receiving grants, especially the larger projects, are multi-disciplinary. An exact specification of the distribution among disciplines and university departments is therefore difficult. Grants are listed under the subject deemed to be most central, usually the field represented by the coordinating scholar. The tables supply a generally accurate description of Foundation activities.

Grants listed under "social science" (see Table 1) comprised 52.3% of the total grants awarded in 1989. The corresponding percentage for 1965-1989 (Table 4) is 55.2%.

The percentile distribution among disciplines can vary considerably from one year to another. However, the differences should not be viewed as changes in the Foundation's grant allocation policies. Differences are usually due to the addition or conclusion of some major, multidisciplinary project, classified under a particular heading, during the year.

In 1989, 222 project grants of 594 processed applications were awarded in whole or part. The rejected applications were for grants totalling more than SEK 160 million. Seventy-three of the approved grants were for new projects.

New grants accounted for 29.7% of the total amount approved during the year (Table 2). Only 11.7% of the amounts sought for new projects was approved. As in previous years, competition for grants from the Bank of Sweden Tercentenary Foundation was severe.

Table 1. Applications for grants awarded in 1989 (in 1.000 SEK)

Field	Grants awarded		Applications		Grants awarded		Per field
	No.	Amount	No.	Amount	% of amount sought	% of no. sought	
Social sciences	110	35.096	238	86.184	40,7	46,2	52,3
Economic history	9	3.330	17	6.712	49,6	53,0	5,0
Business administration	8	2.773	20	9.270	29,9	40,0	4,0
Economics	7	2.859	18	9.489	30,1	38,9	4,3
Cultural geography	9	3.550	15	4.997	71,0	60,0	5,3
Education	7	2.063	20	6.291	32,8	35,8	3,1
Psychology	29	7.510	57	18.519	40,6	50,9	11,2
Sociology	11	3.252	30	10.411	31,2	36,7	4,8
Anthropology	1	400	5	1.919	20,8	20,0	0,6
Statistics	2	465	3	1.188	39,1	66,7	0,7
Political science	22	7.692	40	13.628	56,4	55,0	11,5
Law	5	1.202	13	3.760	32,0	38,5	1,8
Humanities	48	13.873	141	50.017	27,7	34,0	20,6
Medicine	29	8.639	95	37.422	23,1	30,5	12,9
Natural science	20	5.784	88	38.163	15,2	22,7	8,6
Technology	12	3.055	28	12.552	24,3	42,9	4,6
Miscellaneous	3	680	4	5.680	12,0	75,0	1,0
Total project grants	222	67.127	594	230.018	29,2	37,4	100,0
Travel grants, salary increases and spec. committees		1.150					
TOTAL for research		68.277					

Table 2. Grants for project continuation/new grants in 1989 (in 1.000 SEK)

Type of application	Grants awarded		Applications		Grants awarded		Per grant
	No.	Amount	No.	Amount	% of amount sought	% of no. sought	
Grants for project continuation	149	47.199	159	59.237	79,7	93,7	70,3
New grants	73	19.928	435	170.781	11,7	16,8	29,7
TOTAL	222	67.127	594	230.018	29,2	37,4	100,0

Table 3. The number of final and non-recurrent grants in 1989 classified by project duration and field.

Duration (years)	Social science	Humanities	Medicine	Natural science	Technology	Miscellaneous	Total	%
-2	1	-	-	1	-	-	2	3,3
2-3	19	7	3	3	3	-	35	57,4
4-5	11	1	3	2	1	-	18	29,5
6-7	4	-	1	-	-	-	5	8,2
8-	1	-	-	-	-	-	1	1,6
TOTAL	36	8	7	6	4	-	61	100,0

Table 4. Grants from 1965-1989 (in 1.000 SEK)

Field	Applications granted		Amount awarded as a % per field
	Number	Amount	
Social sciences	2.168	435.352	55,2
Economic history	134	25.489	3,2
Business administration	137	22.011	2,8
Economics	245	55.546	7,1
Cultural geography	190	48.623	6,2
Education/Psychology	509	95.562	12,1
Sociology/Anthropology	382	70.487	8,9
Statistics	93	17.057	2,2
Political science	388	87.865	11,1
Law	90	12.712	1,6
Humanities	917	165.442	21,0
Medicine	401	88.680	11,3
Natural science	308	71.859	9,1
Technology	61	13.088	1,7
Miscellaneous	89	13.637	1,7
TOTAL	3.944	788.058	100,0

Foundation Publications

As a rule, research overviews and documentation from symposia, conferences etc. held by the Bank of Sweden Tercentenary Foundation are published in the Foundations own publication series. The committees active over the years have generally been the most productive contributors to this series.

The titles (given here in English translation, although the material is not available in an English version unless otherwise stated) listed below do not supply much information on the publication's contents. But Foundation staff will be pleased to supply additional details, including the addresses from which material can be ordered.

The following titles have appeared to date in our publication series:

RJ 1977:1	Working life, economics and the evolution of welfare
RJ 1977:2	Listen, look, read
RJ 1977:3	Hello, Hello
RJ 1978:1	Where do all the strings lead?
RJ 1978:2	Threat or promise?
RJ 1978:3	Dialogue
RJ 1978:4	Two-cable TV and telephone conferencing
RJ 1978:5	At the press of a button
RJ 1978:6	Attitudes towards technology
RJ 1978:7	Pain and acupuncture
RJ 1979:1	Waiting in the wings
RJ 1979:2	Planning
RJ 1979:3	Research on gender equality
RJ 1979:4	Modern times
RJ 1980:1	The value and meaning of work
RJ 1980:2	Current research on women
RJ 1980:3	Research on working life
RJ 1980:4	Equality perspectives in research
RJ 1980:5	Communications—despite disability
RJ 1980:6	Research on taxation
RJ 1981:1	Swedish research on taxation from 1919-1979
RJ 1981:2	The lives of women in Swedish society
RJ 1982:1	The risk of becoming an alcoholic
RJ 1982:2	Contrary to accepted standards
RJ 1982:3	Changing ways of life
RJ 1983:1	Women and Men in Swedish Society (in English)
RJ 1983:2	How are we going to cope with 1990?
RJ 1984:1	Alcohol policies and research
RJ 1984:2	Eastern bloc research in Sweden from 1950-1983
RJ 1985:1	Research on taxes
RJ 1986:1	Taxes—a problem for society?
RJ 1986:2	Finance theory investigations
RJ 1987:1	Technology and employment in future
RJ 1987:2	Social science and humanities research on sports
RJ 1988:1	Research in aesthetic subjects
RJ 1989:1	The Swedish Riksdag in an International Perspective (in English)

Board of Directors

Members

Professor Kjell Härnqvist

Chairman

Lars Svensson, M.P.

Deputy chairman

Professor Barbara Cannon

Professor Walter Korpi

Professor Jarl Torbacke

Direktör Lennart Holmström

Arne Kjörnsberg, M.P.

Berit Löfstedt

Lars Tobisson, M.P.

Britta Bjelle, M.P.

Birgitta Hambraeus, M.P.

Deputies

Professor Bengt Pernow

Gertrud Sigurdsen, M.P.

Professor Lars-Göran Stenelo

Professor Lars Furuland

Professor Lars Werin

Direktör Sten Wikander

Viola Furubjelke, M.P.

Margareta Winberg

Rune Rydén, M.P.

Lennart Alsén, M.P.

Agne Hansson, M.P.

Auditors

The Riksdag's auditors

Hagström & Olsson AB

Chief Foundation auditor: Per Björngård, chartered accountant

Committees

1. (*Economics, geography etc.*): Lars Werin, Professor (*chairman*), Britta Bjelle, M.P., Birgitta Hambraeus, M.P., Rune Rydén, M.P., Lars Engwall, Professor, Lennart Jörberg, Professor, and Sture Öberg, Professor.
 2. (*Behavioural sciences etc.*): Kjell Härnqvist, Professor (*chairman*), Walter Korpi, Professor, Gertrud Sigurdsen, M.P., Lars Svensson, M.P., Anita Jacobsson-Widding, Professor, and Lars-Göran Nilsson, Professor.
 3. (*Political science, Law etc.*): Lars-Göran Stenelo, Professor (*chairman*), Lennart Alsén, M.P., Lars Tobisson, M.P., Margareta Winberg, M.P., Peter Jagers, Professor, and Kjell Åke Modeer, Professor.
 4. (*Medicine, Natural sciences, Technology etc.*): Bengt Pernow, Professor (*chairman*), Barbara Cannon, Professor, Viola Furubjelke, M.P., Agne Hansson, M.P., Daniel Jagner, Professor, and Mari Åsberg, Professor.
 5. (*Humanities etc.*): Lars Furuland, Professor (*chairman*), Arne Kjörnsberg, M.P., Berit Löfstedt, M.P., Jarl Torbacke, Professor, Mats Furberg, Professor, and Per Linell, Professor.
 6. (*Finances*): Sten Wikander (*chairman*) and Lennart Holmström.
- The managing director participates in the work of all the committees.

The *sector committee* for Research on the Riksdag's Operations and Procedures had the following members: Bertil Fiskesjö, M.P., Stig Gustafsson, M.P., Berit Löfstedt, M.P., Olle Svensson, M.P., Jan Erik Wikström, M.P., Gunnar Biörck, Professor, Olof Ruin, Professor, Nils Stjernquist, Professor (executive member), Bo Särlevik, Professor, Nils-Eric Svensson, Professor (*chairman*) and Anna-Lena Winberg (*secretary*).

Office staff

Nils-Eric Svensson

Lars-Erik Klangby

Anitha Asplund

Margareta Bulér

Inger Nyhlén

Torgny Prior

Inga-Lill Stenbeck-Ottoson

Kerstin Stigmark

Anna-Lena Winberg

*Managing director, Professor**Finance director**Clerk**Secretary to the managing director**Programme secretary, medicine, natural sciences, technology**Portfolio administrator, financial analyst**Chief accountant**Programme Secretary, economics, geography, behavioural sciences**Programme Secretary, humanities, political science*

Stiftelsen

RIKSBANKENS JUBILEUMSFOND

The Bank of Sweden Tercentenary Foundation

Address: Olof Palmes Gata 13 A, S-111 37 Stockholm

Telephone National: (08)24 32 15

Telephone International: +46 8 24 32 15

Telefax National: (08)10 30 76

Telefax International: +46 8 10 30 76

Postal Giro: 67 24 03-3