

1811 — 1986

BANK OF FINLAND

Monthly Bulletin

175TH
ANNIVERSARY
OF THE
BANK OF FINLAND

A tribute by the President of the Republic
on the occasion of the Bank of Finland's
175th anniversary

The Bank of Finland and the develop-
ment of Finnish financial markets

Monetary and foreign exchange policy
measures from December 1985 to Novem-
ber 1986

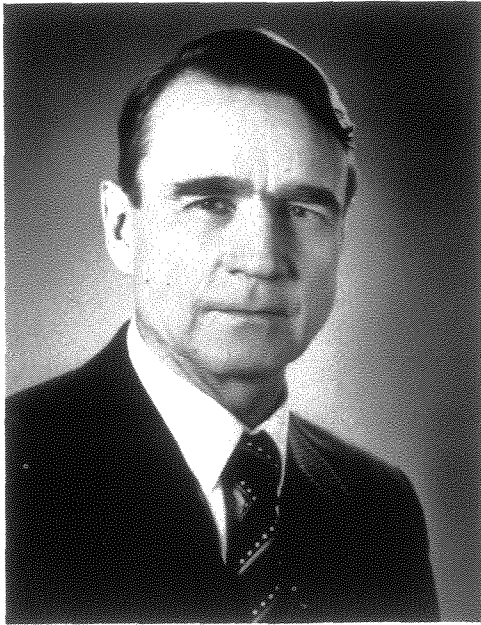
The Bank of Finland's new bank note
series

Transfer of the share capital of the Mort-
gage Bank of Finland Ltd to Postipankki

Publication of the Bank of Finland

NOVEMBER 1986

Vol. 60 No. 11



Mauno Koivisto

A TRIBUTE BY
THE PRESIDENT OF THE REPUBLIC
ON THE OCCASION OF
THE BANK OF FINLAND'S
175TH ANNIVERSARY

The Bank of Finland celebrates its 175th Anniversary on December 12, 1986. It is one of the world's oldest central banks, and older than Finland's independence as a state.

The significance of the Bank of Finland in the history of our country extends far beyond its functions in the monetary sphere. The Bank is one of those national institutions on which rested Finland's economic, cultural and political maturation into an independent nation.

During the nearly 70 years of the independence of the Republic of Finland, the Bank of Finland has occupied a very important position in the country's economic policy. In the post-World War II circumstances of extensive exchange and interest rate controls, the Bank of Finland assumed an exceptionally prominent role. The Bank's significance in economic policy was further enhanced by the fact that, for much of this period, governments were comparatively short-lived and the responsibility for the continuity of economic policy fell largely to the Bank of Finland.

Finland's domestic political scene has, however, stabilized in so far that the life span of governments has clearly lengthened. At the same time, this has reaffirmed the position of the Government in relation to the Bank of Finland in economic policy decision-making. This development has increased the need for contacts and cooperation between them.

The primary task entrusted to the Bank of Finland is the maintenance of the stability and security of the country's monetary system. According to the Currency Act, the Bank of Finland is also responsible for preserving the external value of the markka. These functions have not posed an obstacle to the Bank of Finland's participation in varied forms in overall economic policy. Recently, however, the basic functions of the Bank of Finland have been stressed in a new way. The internationalization of the Finnish economy has advanced to a stage where the domestic financial markets have become noticeably more open with respect to the rest of the world than previously. Under these circumstances, the aim of

preserving the external value of the markka sets increasingly strict limits on what the Bank of Finland is able to do in the pursuit of domestic objectives. In many matters, the Government and labour market parties have come to play a more influential role.

The process of internationalization has not been entirely painless. It has required structural adjustment on the part of industry and commerce and the development of new instruments and approaches in economic policy. We have become more exposed to changes occurring in the world at large, including disturbances of various kinds. On the other hand, a condition for the continuation of economic growth is that Finnish companies expand their operations abroad on an ever-increasing scale. Financial services must be able to keep abreast of this development, in spite of the risks that growing internationalization entails.

The increased integration of domestic financial markets with the world financial system has

not only involved relaxation of exchange controls. At the same time, the entire Finnish financial system has been developed so as to better correspond to the needs of international economic relations. In the future, this may necessitate changes in taxation and in the legislation regulating banks' activities.

Some simplification in the Bank of Finland's functions and the concentration of its economic policy responsibilities on issues concerning the value of the currency are in the offing. This does not, however, imply any reduction in the Bank's responsibilities or in its functions. Ongoing change will continue to pose great challenges both for the arsenal of economic policy weapons at the disposal of the central bank and for the Bank's activities in general. Notwithstanding this, the fundamental task of the Bank of Finland will remain to ensure, in the best possible way, the prerequisites for the balanced development of the Finnish economy.

A handwritten signature in black ink, consisting of a stylized first name followed by a long, horizontal, slightly wavy line representing the last name.

BANK OF FINLAND

Mill. FIM

	1985		1986			
	Oct. 31	Dec. 31	Oct. 8	Oct. 15	Oct. 23	Oct. 31
Assets						
Gold and foreign currency claims	21 919	22 650	13 929	13 673	14 827	14 627
Gold	1 732	2 081	2 081	2 081	2 081	2 081
Special drawing rights	925	931	981	980	981	983
IMF reserve tranche	805	775	799	798	798	801
Convertible currencies	18 208	18 608	7 406	7 028	7 856	7 517
Tied currencies	249	255	2 662	2 786	3 111	3 245
Other foreign claims	2 818	2 645	2 566	2 566	2 566	2 566
Markka subscription to Finland's IMF quota	2 818	2 645	2 566	2 566	2 566	2 566
Claims on financial institutions	9 665	9 256	11 697	12 212	10 943	11 555
Banks' cheque accounts	41	—	—	—	—	—
Call money advances	5 950	5 219	7 504	8 146	6 758	7 128
Till-money credits	1 567	1 925	1 838	1 767	1 848	1 755
Bonds	2 058	2 065	2 213	2 194	2 185	2 097
Other claims on financial institutions	49	47	142	105	152	575
Claims on the public sector	1 269	1 023	1 006	1 000	1 001	1 002
Government promissory notes	280	—	—	—	—	—
Bonds	107	118	83	76	75	75
Total coinage	882	891	923	924	926	927
Other claims on the public sector	—	14	0	0	—	—
Claims on corporations	4 948	4 679	4 829	4 901	4 907	4 925
Financing of exports	1 773	1 601	1 653	1 700	1 711	1 747
Financing of domestic deliveries	3 016	2 924	2 901	2 926	2 922	2 903
Bonds	82	81	67	67	66	67
Other claims on corporations	77	73	208	208	208	208
Other assets	144	146	149	148	149	149
Total	40 763	40 399	34 176	34 500	34 393	34 824
Liabilities						
Foreign currency liabilities	566	576	32	38	42	47
Convertible accounts	34	36	26	27	27	27
Tied currencies	532	540	6	11	15	20
Other foreign liabilities	3 677	3 494	3 411	3 410	3 410	3 412
IMF markka accounts	2 818	2 645	2 567	2 567	2 566	2 566
Allocations of special drawing rights	859	849	844	843	844	846
Notes and coin in circulation	7 322	8 072	7 866	7 864	7 889	7 973
Notes	6 590	7 304	7 089	7 086	7 109	7 193
Coin	732	768	777	778	780	780
Liabilities to financial institutions	16 192	12 153	9 109	9 484	9 226	9 255
Banks' cheque accounts	69	0	0	0	1	0
Call money deposits	5 381	1 205	3	370	167	88
Cash reserve deposits	10 019	10 222	8 957	8 957	8 957	9 052
Capital import deposits	617	639	65	64	20	21
Other liabilities to financial institutions	106	87	84	93	81	94
Liabilities to the public sector	1 559	4 300	1 000	1 001	1 001	1 001
Cheque accounts	1	0	0	1	1	1
Government deposit account	1 500	4 300	1 000	1 000	1 000	1 000
Export deposits	58	—	—	—	—	—
Capital import deposits	—	—	—	—	—	—
Other liabilities to the public sector	0	0	0	0	0	0
Liabilities to corporations	4 270	4 267	5 024	5 019	5 151	5 138
Deposits for investment and ship purchase	3 827	3 841	4 850	4 843	4 829	4 798
Capital import deposits	432	424	170	170	316	334
Other liabilities to corporations	11	2	4	6	6	6
Other liabilities	14	14	22	17	15	18
Valuation account and reserves	936	1 639	1 828	1 783	1 775	2 096
SITRA's capital	400	400	400	400	400	400
Capital accounts	5 827	5 484	5 484	5 484	5 484	5 484
Primary capital	5 000	5 000	5 000	5 000	5 000	5 000
Reserve fund	764	764	484	484	484	484
Undisposed profits	—	—	—	—	—	—
Net earnings	63	-280	—	—	—	—
Total	40 763	40 399	34 176	34 500	34 393	34 824

BANK OF FINLAND

Mill. FIM

End of year or month	Foreign sector						Public sector			
	Gold, SDRs, IMF reserve tranche	Convertible currencies, net	Total convertible reserves (1 + 2)	Tied currencies, net	Other claims, net	Net claims (3 to 5)	Claims	Certificates of deposit and deposit account	Other liabilities	Net liabilities (8 - 7 + 9)
	1	2	3	4	5	6	7	8	9	10
1982	2 444	6 561	9 005	1 525	-1 447	9 083	1 040	1 700	50	710
1983	2 360	5 835	8 195	550	-794	7 951	2 178	3 000	0	822
1984	3 527	15 303	18 830	-337	-917	17 576	1 951	4 200	77	2 326
1985	3 787	18 572	22 359	-285	-849	21 225	1 023	4 300	0	3 277
1985										
Oct.	3 462	18 174	21 636	-283	-859	20 494	1 269	1 500	59	290
Nov.	3 447	18 811	22 258	-166	-853	21 239	1 320	4 400	0	3 080
Dec.	3 787	18 572	22 359	-285	-849	21 225	1 023	4 300	0	3 277
1986										
Jan.	3 797	17 353	21 150	1 090	-849	21 391	1 036	1 000	14	-22
Feb.	3 748	16 865	20 613	740	-833	20 520	972	1 500	0	528
March	3 837	14 581	18 418	500	-848	18 070	976	1 100	0	124
April	3 800	13 017	16 817	421	-830	16 408	978	1 100	0	122
May	3 908	11 125	15 033	989	-866	15 156	984	1 100	1	117
June	3 875	10 603	14 478	1 433	-859	15 052	993	1 250	1	258
July	3 874	8 588	12 462	2 209	-859	13 812	982	1 350	1	369
Aug.	3 883	4 475	8 358	2 576	-846	10 088	984	1 500	1	517
Sept.	3 870	6 989	10 859	2 654	-849	12 664	1 004	890	0	-114
Oct.	3 865	7 490	11 355	3 225	-846	13 734	1 002	1 000	1	-1

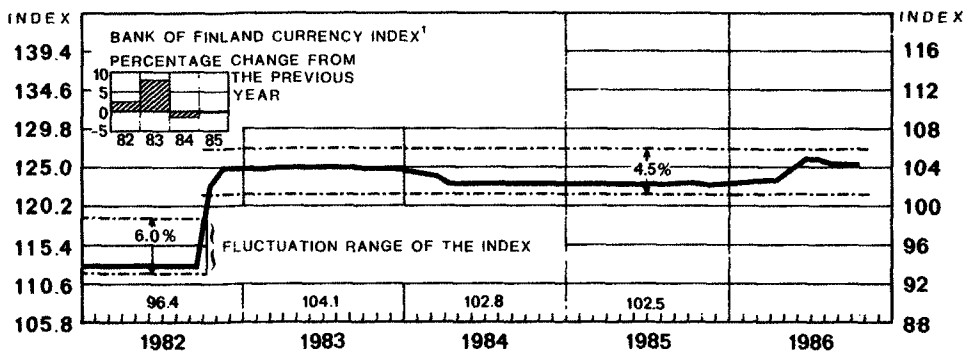
OFFICIAL FOREIGN EXCHANGE RESERVES

Mill. FIM

	Dec. 31, 1985	July 31, 1986	Aug. 29, 1986	Sept. 30, 1986	Oct. 31, 1986
Gold	2 081	2 081	2 081	2 081	2 081
SDRs	931	981	983	986	983
IMF reserve tranche	775	812	819	803	801
Convertible currencies, net	18 572	8 588	4 475	6 989	7 490
Total convertible reserves, net	22 359	12 462	8 358	10 859	11 355
Tied currencies, net	-285	2 209	2 576	2 654	3 225
Total reserves, net	22 074	14 671	10 934	13 513	14 580

End of year or month	Domestic financial sector						Corporate sector				Notes and coin in circulation
	Till-money credits	Claims on cheque accounts, net	Demand for call money by deposit banks	Supply of call money by deposit banks	Cash reserve deposits	Other liabilities, net	Net claims (1+2+3-4-5-6)	Permanent special financing schemes	Liabilities, net	Net claims (8-9)	
	1	2	3	4	5	6	7	8	9	10	11
1982	889	163	3 126	1 470	3 132	-1 042	618	4 302	999	3 303	6 062
1983	942	443	5 785	610	5 039	-1 555	3 076	4 529	1 282	3 247	6 574
1984	1 563	383	5 018	2 216	8 696	-1 235	-2 713	4 646	2 614	2 032	7 442
1985	1 925	0	5 219	1 205	10 222	-1 386	-2 897	4 525	4 113	412	8 072
1985											
Oct.	1 567	-28	5 950	5 381	10 019	-1 384	-6 527	4 789	4 111	678	7 322
Nov.	1 450	-8	5 901	3 881	10 097	-1 992	-4 643	4 707	4 094	613	7 442
Dec.	1 925	0	5 219	1 205	10 222	-1 386	-2 897	4 525	4 113	412	8 072
1986											
Jan.	1 558	0	1 852	1 734	9 828	-1 454	-6 698	4 654	4 434	220	7 455
Feb.	1 531	0	3 174	2 221	9 556	-1 530	-5 542	4 654	4 282	372	7 499
March	1 657	0	3 806	1 102	8 942	-1 494	-3 087	4 691	4 299	392	7 840
April	1 984	0	5 285	1 204	8 846	-1 541	-1 240	4 665	4 513	152	8 094
May	1 842	0	6 070	477	8 862	-1 411	-16	4 644	4 067	577	8 046
June	1 875	0	7 939	2 098	8 891	-2 022	847	4 552	4 585	-33	8 156
July	1 844	0	7 936	612	9 030	-2 070	2 208	4 552	4 669	-117	8 086
Aug.	1 650	0	11 525	252	9 023	-2 119	6 019	4 550	4 718	-168	7 969
Sept.	1 847	0	9 761	1 886	8 954	-2 129	2 897	4 552	4 750	-198	7 903
Oct.	1 755	0	7 128	88	9 052	-2 557	2 300	4 650	4 863	-213	7 973

¹The left-hand scale depicts movements in the external value of the markka under the index in use until December 31, 1983 (1974 = 100), and the right-hand scale movements in the external value of the markka under the revised index introduced on January 1, 1984 (1982 = 100).

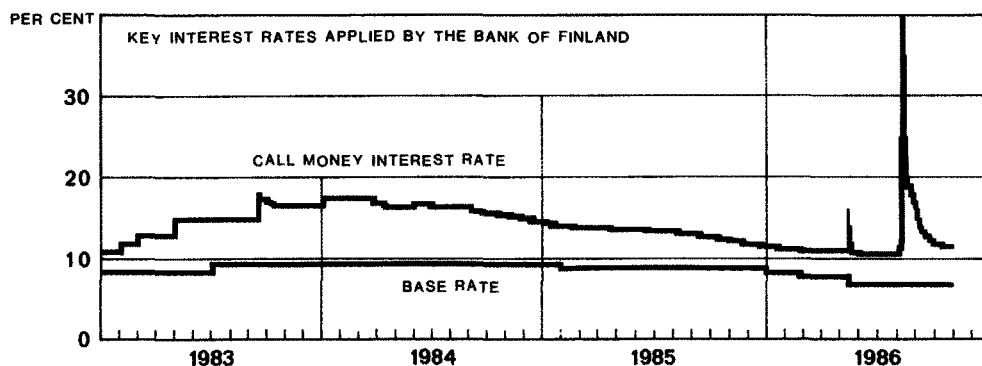


MONETARY POLICY INDICATORS

Average for period	Gross central bank debt of the deposit banks mill. FIM	Net central bank debt of the deposit banks mill. FIM	Cash reserve deposits of the deposit banks mill. FIM	Cash reserve requirement %	Call money credit extended by the Bank of Finland	Call money interest rate %	Average cost of gross central bank debt %	Base rate ¹ %	Average lending rate of the commercial banks ² %
	1	2	3	4	5	6	7	8	9
1981	4 095	-33	2 795	3.5	2 161	11.48	11.61	9.25	9.84
1982	3 201	-783	2 778	3.1	1 571	11.64	11.99	8.81	9.33
1983	4 539	-1 213	4 345	4.3	2 724	15.37	15.14	9.00	9.56
1984	3 176	-6 365	6 325	5.4	-39	16.53	16.53	9.50	10.49
1985	5 812	-8 293	9 578	5.6	1 285	13.37	13.37	9.04	10.41
1985									
Aug.	6 153	-7 843	9 881	5.6	2 038	13.43	13.43	9.00	10.43
Sept.	7 771	-6 928	9 930	5.6	3 002	13.11	13.11	9.00	10.42
Oct.	7 516	-7 079	9 982	5.6	2 904	12.78	12.78	9.00	10.43
Nov.	6 407	-8 485	10 024	5.6	1 539	12.37	12.37	9.00	10.40
Dec.	7 084	-6 784	10 101	5.6	3 317	11.96	11.96	9.00	10.37
1986									
Jan.	5 280	-7 742	10 210	5.3	2 467	11.64	11.64	8.50	9.90
Feb.	4 242	-8 187	9 818	5.0	1 631	11.40	11.40	8.50	9.90
March	5 146	-5 927	9 457	4.7	3 530	11.21	11.21	8.00	9.49
April	5 034	-5 565	8 939	4.7	3 374	11.20	11.20	8.00	9.49
May	6 645	-3 566	8 847	4.7	5 281	12.02	12.02	7.00	8.78
June	6 393	-3 409	8 863	4.7	5 454	10.83	10.83	7.00	8.82
July	7 556	-2 677	8 895	4.7	6 218	10.80	10.80	7.00	8.76
Aug.	11 014	1 239	9 030	4.7	10 269	24.17	24.17	7.00	8.79
Sept.	10 290	68	9 021	4.7	9 088	13.86	13.86	7.00	8.77
Oct.	7 846	-1 524	8 960	4.7	7 436	11.93	11.93	7.00	..

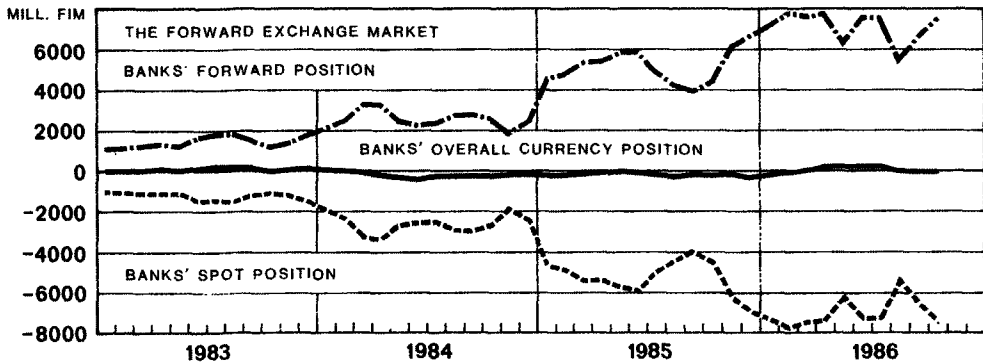
¹ End of period for monthly figures.

² End of period.



FORWARD EXCHANGE MARKETS IN FINLAND

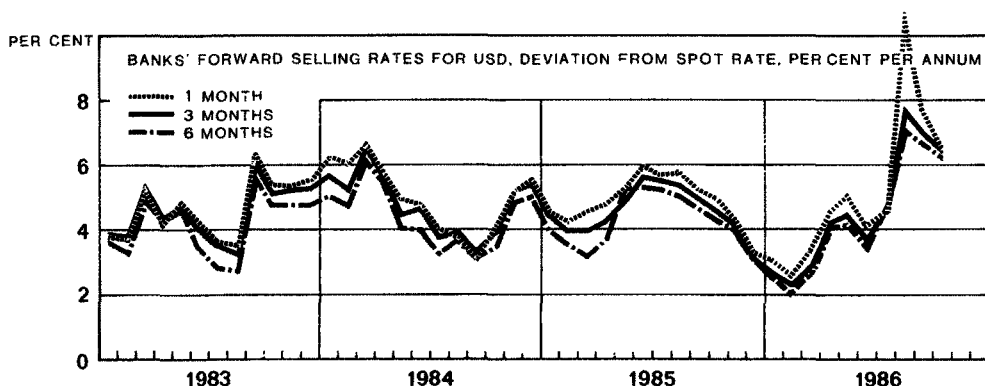
Period	Banks' forward positions in mill. FIM with						Banks' forward selling rates for USD		
	Domestic firms			Foreign banks	Bank of Finland	Overall	Deviation from spot rate, per cent per annum		
	Assets	Liabilities	Net	Net	Net	Net	1 month	3 months	6 months
1	2	3	4	5	6	7	8	9	
1984	22 921	1 394	21 527	2 002	-19 962	3 746	5.6	5.5	5.1
1985	16 982	1 733	15 249	708	-9 005	6 876	3.3	3.2	3.1
1985									
May	22 085	2 316	19 769	1 708	-15 704	5 865	5.3	4.9	4.5
June	21 221	2 259	18 962	1 941	-15 352	5 478	6.0	5.7	5.4
July	19 534	2 250	17 284	2 418	-14 224	5 558	5.7	5.6	5.3
Aug.	18 271	2 727	15 544	1 083	-12 493	4 163	5.8	5.4	5.1
Sept.	17 755	2 889	14 866	92	-11 101	3 811	5.3	5.0	4.7
Oct.	17 666	2 795	14 871	805	-9 813	5 986	5.0	4.6	4.3
Nov.	17 510	2 014	15 496	1 200	-10 032	6 702	4.3	4.1	4.0
Dec.	16 982	1 733	15 249	708	-9 005	6 876	3.3	3.2	3.1
1986									
Jan.	17 233	1 945	15 288	543	-8 349	7 457	3.1	2.7	2.6
Feb.	16 911	1 989	14 923	0	-7 015	7 952	2.7	2.4	2.1
March	16 365	2 095	14 270	11	-6 298	8 042	3.5	3.0	2.8
April	15 350	1 713	13 638	-854	-4 742	7 956	4.6	4.2	4.1
May	15 231	2 505	12 726	-1 642	-3 956	6 957	5.1	4.5	4.2
June	13 094	1 665	11 429	-575	-2 619	8 068	4.2	3.8	3.6
July	12 032	1 518	10 514	-1 170	-1 949	7 619	4.6	4.7	4.8
Aug.	12 351	2 393	9 958	-2 263	-1 559	6 006	12.5	7.8	7.1
Sept.	13 762	2 179	11 583	-1 981	-1 291	8 116	7.8	7.1	6.7



FOREIGN EXCHANGE RATES

Average selling rates for foreign exchange. %M

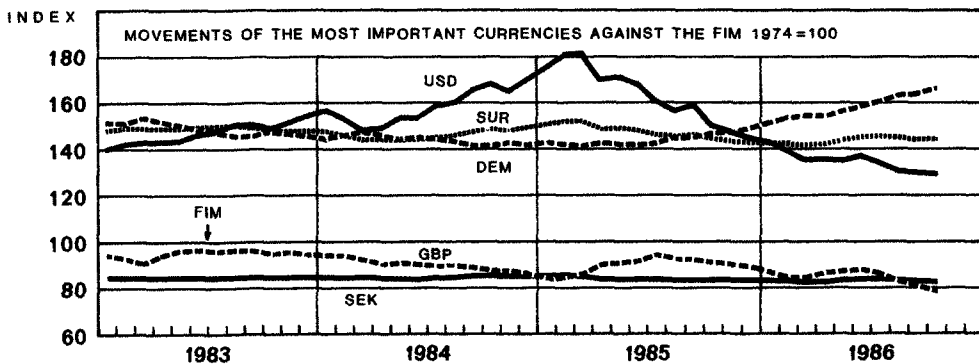
Period	New York 1 US \$ USD	Montreal 1 C \$ CAD	London 1 £ GBP	Dublin 1 Ir£ IEP	Stockholm 100 Skr SEK	Oslo 100 Nkr NOK	Copenhagen 100 Dkr DKK	Frankfurt 100 DM DEM	Amsterdam 100 Hfl NLG	Brussels 100 FB BEC	BEL
	1	2	3	4	5	6	7	8	9	10	11
1981	4.315	3.602	8.731	6.976	85.74	75.54	60.96	191.31	173.43	11.688	11.095
1982	4.820	3.913	8.423	6.854	77.03	74.84	57.93	198.76	180.66	10.584	9.859
1983	5.570	4.524	8.456	6.957	72.75	76.44	61.07	218.61	195.66	10.934	10.742
1984	6.010	4.645	8.023	6.533	72.77	73.84	58.16	211.65	187.72	10.428	10.274
1985	6.206	4.554	8.000	6.590	72.22	72.31	58.71	211.42	187.45	10.483	10.421
1985											
Sept.	6.025	4.404	8.232	6.611	71.89	72.39	58.60	212.50	188.92	10.510	10.431
Oct.	5.690	4.168	8.106	6.676	71.63	72.10	59.41	215.47	191.11	10.633	10.556
Nov.	5.579	4.060	8.042	6.668	71.60	71.66	59.53	215.40	191.26	10.654	10.608
Dec.	5.487	3.941	7.952	6.737	71.57	71.85	60.23	218.51	194.03	10.722	10.666
1986											
Jan.	5.419	3.860	7.747	6.772	71.49	71.90	60.64	222.15	197.11	10.875	10.733
Feb.	5.258	3.748	7.513	6.827	71.14	72.27	61.15	225.39	199.50	11.018	10.904
March	5.131	3.659	7.531	6.868	71.01	72.07	61.43	226.89	200.97	11.087	10.962
April	5.128	3.700	7.682	6.853	70.92	71.80	61.17	225.64	200.20	11.066	10.970
May	5.105	3.717	7.774	6.985	71.57	68.98	62.01	229.35	203.69	11.237	11.168
June	5.195	3.745	7.840	7.055	72.17	68.34	62.77	232.54	206.54	11.389	11.307
July	5.074	3.681	7.671	7.067	71.93	68.03	63.06	235.78	209.25	11.460	11.372
Aug.	4.940	3.564	7.356	6.665	71.41	67.31	63.72	239.66	212.56	11.580	11.465
Sept.	4.918	3.552	7.256	6.632	71.27	67.17	63.77	241.14	213.60	11.646	11.525
Oct.	4.896	3.532	7.005	6.669	71.26	66.74	64.89	244.46	216.31	11.780	11.692



Average selling rates for foreign exchange. FIM

Zurich 100 Sfr CHF	Paris 100 FF FRF	Rome 100 Lit ITL	Vienna 100 ÖS ATS	Lisbon 100 Esc PTE	Reykjavik 100 lkr ISK	Madrid 100 Ptas ESB	Tokyo 100 Y JPY	Moscow 1 Ci Rbl SUR	1 special drawing right SDR	Currency index ¹
12	13	14	15	16	17	18	19	20	21	22
220.34	79.92	0.385	27.17	7.17	60.35	4.72	1.967	5.986	5.071 40	113.1
237.79	73.65	0.358	28.31	6.13	40.79	4.41	1.943	6.624	5.305 63	115.9
265.70	73.53	0.369	31.11	5.14	23.25	3.91	2.351	7.491	5.943 25	125.1
256.42	69.07	0.344	30.13	4.14	19.39	3.75	2.534	7.357	6.147 39	102.8
253.60	69.40	0.327	30.12	3.67	15.20	3.66	2.610	7.419	6.278 79	102.5
258.26	69.77	0.318	30.25	3.57	14.57	3.59	2.550	7.366	6.183 31	102.6
262.81	70.80	0.320	30.69	3.52	13.85	3.54	2.653	7.262	6.051 77	102.6
262.36	70.80	0.320	30.66	3.50	13.63	3.51	2.740	7.209	6.016 47	102.4
261.01	71.57	0.322	31.12	3.48	13.36	3.54	2.710	7.183	5.971 01	102.5
262.42	72.55	0.327	31.63	3.49	13.03	3.56	2.712	7.164	5.940 24	102.6
269.08	73.58	0.332	32.10	3.50	12.80	3.59	2.850	7.161	5.926 58	102.7
269.37	73.91	0.335	32.36	3.48	12.67	3.62	2.876	7.131	5.888 85	102.8
269.68	71.33	0.331	32.17	3.46	12.61	3.58	2.931	7.148	5.886 47	102.7
275.83	72.13	0.335	32.65	3.46	12.74	3.62	3.062	7.230	5.954 02	103.8
282.20	73.11	0.340	33.12	3.47	12.81	3.65	3.099	7.301	6.039 58	105.0
290.80	73.42	0.345	33.55	3.45	12.58	3.70	3.201	7.313	6.024 88	105.0
297.48	73.68	0.350	34.09	3.41	12.40	3.69	3.209	7.278	5.960 80	104.5
297.72	73.79	0.351	34.31	3.39	12.38	3.68	3.182	7.255	5.943 98	104.5
298.52	74.81	0.355	34.81	3.37	12.36	3.69	3.139	7.252	5.922 50	104.5

¹ Until December 31, 1983 the base year was 1974=100.
Since January 1, 1984 the base year has been 1982=100.



DEPOSITS BY THE PUBLIC

Mill. FIM

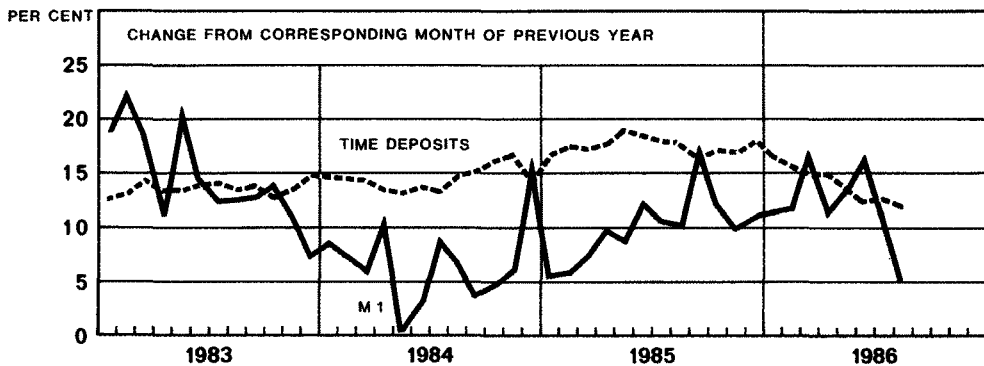
End of year and month	Demand deposits				Time deposits				Total (4 + 9)	
	Commercial banks	Savings banks & Co-op. banks	Posti-pankki	All deposit banks (1 to 3)	Commercial banks	Savings banks	Co-op. banks	Posti-pankki		All deposit banks (5 to 8)
	1	2	3	4	5	6	7	8	9	10
1982	7 155	3 874	3 049	14 078	29 465	25 883	21 040	8 665	85 054	99 132
1983	7 056	4 567	3 676	15 300	34 302	29 273	24 175	9 938	97 689	112 988
1984	8 470	5 268	4 463	18 201	39 354	33 333	27 900	11 266	111 852	130 053
1985*	9 382	5 988	5 027	20 397	49 240	38 167	32 133	12 671	132 210	152 607

1985*

July	7 927	4 874	5 283	18 084	44 294	36 219	30 455	11 799	122 767	140 851
Aug.	7 222	4 917	5 739	17 878	44 796	36 551	30 741	12 083	124 171	142 049
Sept.	8 081	5 072	6 243	19 397	44 770	36 469	30 658	11 973	123 870	143 267
Oct.	8 281	5 194	5 547	19 022	45 896	36 825	30 892	12 366	125 979	145 001
Nov.	7 654	5 038	5 057	17 749	46 887	37 016	31 155	12 220	127 278	145 027
Dec.	9 382	5 988	5 027	20 397	49 240	38 167	32 133	12 671	132 210	152 607

1986*

Jan.	8 239	5 350	5 210	18 798	49 624	38 550	32 842	12 867	133 883	152 681
Feb.	7 854	5 028	5 133	18 015	50 700	39 154	33 413	12 983	136 250	154 265
March	7 552	5 105	5 678	18 335	49 777	39 307	33 586	13 032	135 703	154 037
April	8 228	5 464	5 045	18 737	50 261	39 407	33 796	13 184	136 647	155 384
May	8 188	5 532	5 542	19 262	50 549	39 737	33 966	13 283	137 534	156 796
June	9 843	5 854	5 769	21 467	50 249	40 498	34 639	12 784	138 170	159 636
July	9 141	5 837	5 629	20 606	49 832	40 837	34 897	12 981	138 547	159 153



ADVANCES TO THE PUBLIC – MONEY SUPPLY

Mill. FIM

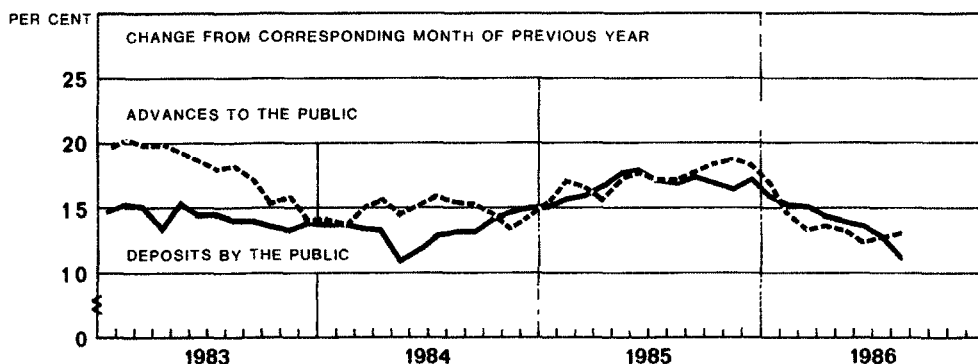
End of year and month	Advances granted by				Types of advances			Total (1 to 4) (5 to 7)	Money Supply	
	Commercial banks	Savings banks	Co-op. banks	Posti-pankki	Loans & bills in domestic currency	Cheque credits	Domestic credits in foreign currency		M ₁	M ₁ + Quasi-Money
	1	2	3	4	5	6	7		8	9
1982	48 620	25 682	23 601	12 684	93 014	3 468	14 105	110 587	19 917	107 549
1983	56 162	29 276	27 322	13 471	104 627	4 350	17 253	126 231	21 427	121 906
1984	65 965	32 705	31 164	14 687	118 924	5 233	20 363	144 520	24 945	141 658
1985*	81 669	36 991	35 751	16 745	140 139	6 313	24 704	171 155	27 694	166 652

1985*

July	77 104	34 848	33 378	16 074	128 886	6 242	26 275	161 403	24 902	154 118
Aug.	77 677	35 276	33 824	16 082	130 846	6 333	25 680	162 859	24 783	155 013
Sept.	79 367	35 764	34 411	16 376	133 113	6 637	26 167	165 917	26 092	156 195
Oct.	80 304	36 141	34 826	16 442	134 924	6 333	26 456	167 712	25 607	158 054
Nov.	81 573	36 467	35 216	16 727	136 739	6 373	26 872	169 984	24 691	157 772
Dec.	81 669	36 991	35 751	16 745	140 139	6 313	24 704	171 155	27 694	166 652

1986*

Jan.	83 252	37 502	36 049	17 168	142 071	7 148	24 751	173 971	26 029	167 354
Feb.	83 136	37 729	36 388	17 140	143 206	7 294	23 893	174 393	25 304	168 731
March	82 513	38 022	36 698	17 094	144 392	6 935	23 000	174 327	25 881	168 792
April	83 121	38 497	37 076	17 829	145 838	7 269	23 416	176 523	26 370	170 568
May	84 423	38 968	37 488	18 026	148 109	7 074	23 722	178 905	26 622	171 161
June	84 856	39 447	37 967	18 532	149 623	7 634	23 545	180 802	28 879	173 879
July	85 332	39 927	38 490	18 504	151 405	7 369	23 480	182 253	27 670	173 524



FOREIGN TRADE

Mill. FIM

Value, mill. FIM

Period	Value, mill. FIM		Surplus of exports (+) or imports (-)
	Exports f.o.b	Imports c.i.f.	
	1	2	3
1981	60 308	61 269	-961
1982	63 026	64 751	-1 725
1983	69 692	71 528	-1 836
1984	80 904	74 682	+6 222
1985	84 028	81 520	+2 508

1985

Dec.	6 556	7 011	-455
------	-------	-------	------

1986*

Jan.	6 792	7 466	-674
Feb.	6 924	6 309	+615
March	6 309	6 976	-667
April	6 453	6 794	-340
May	6 311	5 145	+1 166
June	5 564	3 930	+1 634
July	7 003	6 654	+349
Aug.	6 476	6 485	-8

Jan.-Aug.

1985	56 377	52 679	+3 698
1986*	51 833	49 757	+2 075

Indices of exports and imports
1980 = 100

Period	Volume		Unit value		Terms of trade
	Exports	Imports	Exports	Imports	
	1	2	3	4	
1981	103	94	111	112	99
1982	100	95	119	117	101
1983	104	98	127	125	101
1984	114	98	134	131	102
1985	115	104	138	135	102

1984

Apr.-June	113	99	133	130	103
July-Sept.	108	99	137	133	102
Oct.-Dec.	121	101	137	134	102

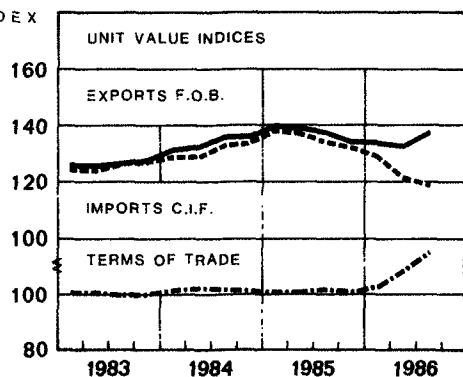
1985

Jan.-March	108	93	141	139	101
Apr.-June	122	106	139	138	101
July-Sept.	113	100	138	135	102
Oct.-Dec.	117	113	135	133	102

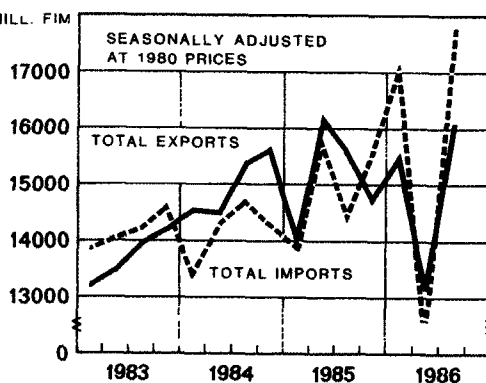
1986*

Jan.-March	113	110	134	130	104
Apr.-June	104	90	133	122	109

INDEX



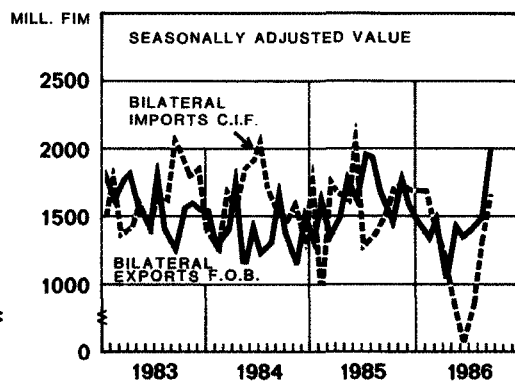
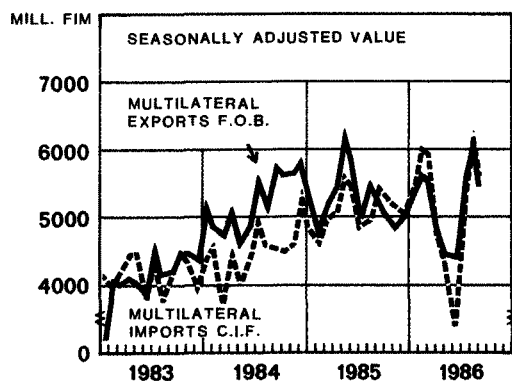
MILL. FIM



FOREIGN TRADE BY MAIN GROUPS

Mill. FIM

Period	Exports, f.o.b.					Imports, c.i.f.				
	Agri-cultural and other primary products	Wood industry products	Paper industry products	Metal engineering industry products	Other goods	Raw materials and intermediate goods	Fuels and lubricants	Finished goods		Other goods
								Investment goods	Consumer goods	
1	2	3	4	5	6	7	8	9	10	
1981	2 036	6 852	17 127	14 858	19 435	39 156	5 115	8 877	8 015	106
1982	1 676	6 278	17 502	18 908	18 662	41 144	4 869	9 195	9 130	413
1983	1 723	6 944	19 327	20 211	21 487	44 757	5 006	10 860	10 572	333
1984	2 865	7 145	23 573	22 998	24 323	47 028	5 034	10 993	11 454	173
1985	2 678	6 728	25 030	24 412	25 179	50 944	5 502	11 675	12 967	432
1985										
Dec.	128	538	1 797	2 114	1 979	4 539	441	1 027	996	8
1986*										
Jan.	274	490	1 855	2 201	1 973	4 866	474	1 038	1 080	7
Feb.	350	486	1 829	1 940	2 319	3 726	316	888	1 369	8
March	319	516	1 801	1 704	1 969	4 039	218	1 192	1 503	24
April	148	583	2 051	2 103	1 568	3 864	389	1 101	1 418	22
May	128	494	1 809	2 338	1 542	3 124	230	784	991	17
June	142	506	2 015	1 412	1 490	2 336	166	687	739	2
July	263	637	2 309	2 068	1 725	3 739	425	1 245	1 240	6
Aug.	238	546	2 074	1 815	1 803	3 550	422	1 067	1 421	25
Jan.-Aug.										
1985	2 054	4 470	17 088	16 140	16 623	33 074	3 304	7 466	8 430	405
1986*	1 863	4 257	15 742	15 581	14 390	29 244	2 639	8 003	9 760	111



FOREIGN TRADE BY COUNTRIES

Mill. FIM

Area and country	Exports, f.o.b.				Imports, c.i.f.			
	January–Aug.				January–Aug.			
	1985		1986*		1985		1986*	
	%	Mill. FIM	%	Mill. FIM	%	Mill. FIM	%	Mill. FIM
OECD countries in Europe	56.1	31 603	61.6	31 924	56.3	29 673	61.9	30 818
Austria	0.7	375	0.9	468	1.1	590	1.3	660
Belgium and Luxembourg	1.4	789	1.7	893	2.0	1 055	2.4	1 201
Denmark	3.9	2 187	4.0	2 094	2.5	1 300	2.8	1 409
France	4.0	2 262	4.5	2 335	3.5	1 821	4.2	2 095
Federal Republic of Germany	9.2	5 170	9.9	5 128	14.9	7 866	17.0	8 483
Italy	1.9	1 097	2.1	1 089	3.4	1 814	4.4	2 189
Netherlands	3.3	1 830	3.6	1 872	2.9	1 542	3.0	1 473
Norway	4.1	2 329	4.6	2 383	2.6	1 381	2.3	1 134
Portugal	0.3	173	0.3	140	0.8	415	0.9	462
Spain	0.8	462	1.1	552	1.0	528	1.1	558
Sweden	12.7	7 154	14.6	7 568	11.5	6 044	13.1	6 506
Switzerland	1.5	838	1.7	875	1.6	864	2.0	993
United Kingdom	10.8	6 089	11.0	5 693	7.6	4 017	6.6	3 266
Other	1.5	849	1.6	834	0.8	435	0.8	389
OECD countries outside Europe	10.5	5 898	9.5	4 930	11.5	6 055	12.4	6 185
Canada	1.3	706	1.2	600	0.7	379	0.5	228
Japan	1.5	859	1.6	807	5.3	2 768	6.7	3 330
United States	6.5	3 668	5.7	2 936	5.2	2 763	4.8	2 413
Other	1.2	666	1.1	587	0.3	144	0.4	214
CMEA countries	23.5	13 260	20.7	10 731	23.8	12 556	18.1	9 010
Czechoslovakia	0.3	194	0.3	180	0.5	242	0.5	255
German Democratic Republic	0.5	297	0.4	187	0.5	256	0.6	294
Poland	0.5	267	0.3	147	1.4	754	1.4	689
Soviet Union	21.5	12 149	19.0	9 824	20.9	10 998	15.0	7 473
Other	0.6	353	0.8	394	0.6	307	0.6	299
Latin America	1.6	926	1.5	784	2.7	1 412	2.5	1 258
Argentina	0.1	45	0.1	44	0.2	80	0.1	75
Brazil	0.2	96	0.2	110	0.9	468	0.8	393
Colombia	0.2	91	0.1	54	0.6	330	0.7	331
Other	1.2	695	1.1	577	1.0	533	0.9	460
Other	8.3	4 690	6.7	3 464	5.7	2 983	5.0	2 486
GRAND TOTAL	100.0	56 377	100.0	51 833	100.0	52 679	100.0	49 757
<i>of which</i>								
EFTA countries	19.1	10 787	22.0	11 384	17.0	8 954	18.8	9 358
EEC countries	36.6	20 626	39.2	20 329	39.3	20 687	43.1	21 424
OECD countries	66.5	37 501	71.1	36 854	67.8	35 728	74.4	37 003

BALANCE OF PAYMENTS

Period	Exports f.o.b.	Imports c.i.f.	Trade account (1-2)	Transport. net	Travel, net	Other services, net	Goods and services account (3 to 6)	Invest- ment income, net	Un- requited transfers, net	Other, net	Current account (7 to 10)
	1	2	3	4	5	6	7	8	9	10	11
1982	62 867	65 147	-2 280	+2 856	-277	+1 732	+2 031	-5 447	-643	+161	-3 898
1983	69 368	72 139	-2 771	+3 200	-748	+1 610	+1 291	-5 817	-797	+96	-5 227
1984	80 608	75 127	+5 480	-4 008	-1 211	-306	+7 971	-6 786	-1 050	-238	-103
1985*	83 769	81 870	-1 899	+3 677	-1 766	-859	+2 951	-6 259	-1 003	-390	-4 700

1983

July-Sept.	16 180	17 970	-1 790	+888	+45	+487	-370	-1 463	-174	+53	-1 954
Oct.-Dec.	19 350	20 162	-812	+815	-272	+693	+424	-1 305	-204	-4	-1 089

1984

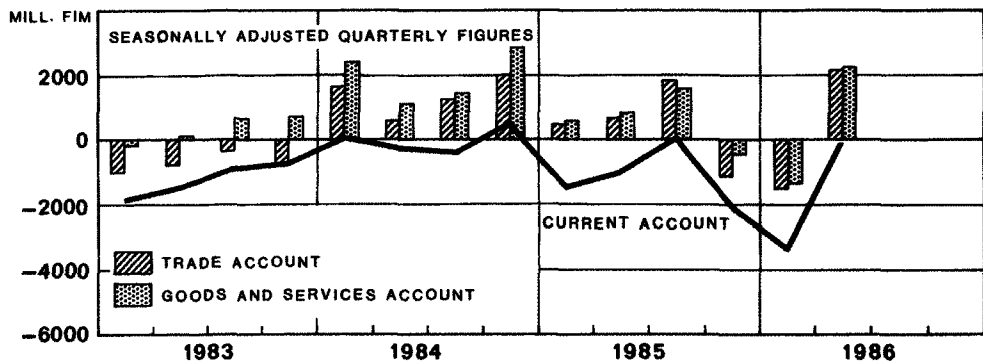
Jan.-March	19 678	17 069	+2 609	+1 018	-370	-60	+3 197	-2 010	-284	-60	+843
Apr.-June	19 700	18 852	+849	+1 009	-326	-174	+1 357	-1 225	-202	-39	-108
July-Sept.	19 395	19 330	+65	+1 144	-123	-265	+820	-1 593	-279	-46	-1 098
Oct.-Dec.	21 834	19 877	+1 958	+837	-392	+194	+2 597	-1 958	-285	-93	+261

1985*

Jan.-March	20 057	18 937	+1 120	+872	-517	-288	+1 187	-1 809	-322	-145	-1 088
Apr.-June	22 436	21 407	+1 030	+993	-481	-370	+1 172	-1 679	-230	-71	-808
July-Sept.	20 612	19 652	+961	+907	-295	-261	+1 312	-1 283	-180	-75	-226
Oct.-Dec.	20 663	21 875	-1 211	+905	-473	+60	-719	-1 489	-271	-99	-2 578

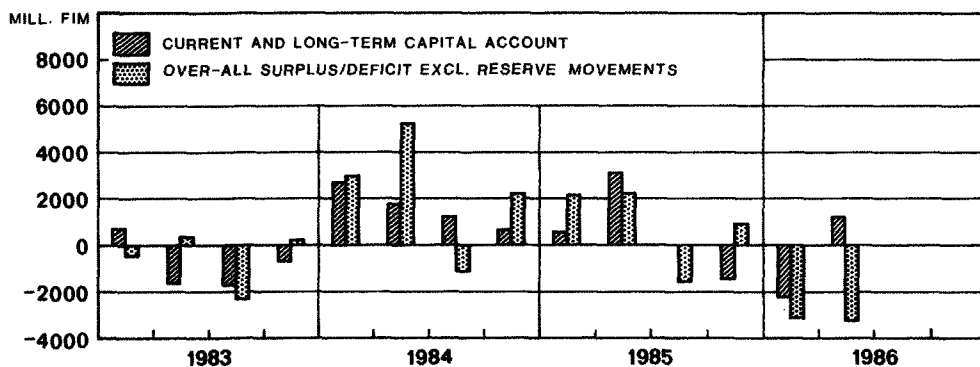
1986*

Jan.-March	20 024	20 907	-884	+798	-553	-136	-774	-1 584	-542	-126	-3 026
Apr.-June	18 247	16 014	+2 233	+678	-598	-43	+2 271	-1 946	-398	-101	-174



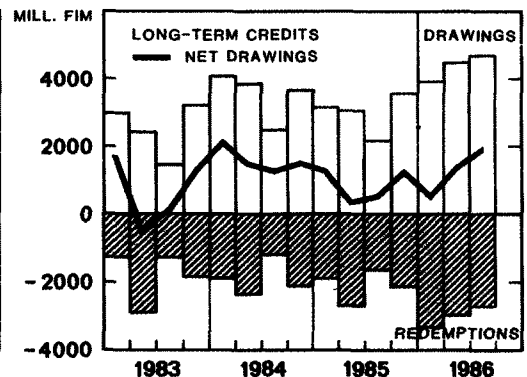
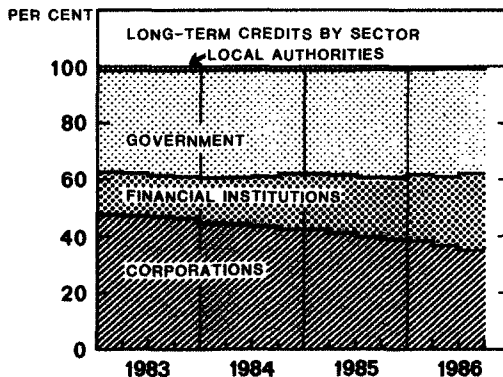
Drawings of long-term loans	Amortizations of long-term loans	Long-term export credits, net	Miscellaneous long-term capital items, net	Long-term capital account (12 to 15)	Current and long-term capital account (11 + 16)	Prepayments and liabilities related to imports	Prepayments and receivables related to exports	Short-term capital of authorized banks, net	Miscellaneous, short-term capital items, incl. errors and omissions	Over-all surplus deficit excl. reserve movements (17 to 21)	Bank of Finland foreign exchange reserves
12	13	14	15	16	17	18	19	20	21	22	23
+10 213	-4 721	-1 239	-3 642	+611	-3 287	-914	+771	-1 493	+1 811	-126	+126
+10 112	-7 273	-423	-1 388	+1 874	-3 353	+3 273	-3 380	+1 266	+32	-2 162	+2 162
+14 087	-7 538	-1 682	+1 428	+6 295	+6 192	+760	+2 995	-2 086	-2 758	+9 275	-9 275
+11 870	-8 255	+1 339	+1 840	+6 794	+2 094	+440	-2 062	+5 267	-1 994	+3 744	-3 744
+1 479	-1 269	+142	-129	+223	-1 731	+1 197	-1 662	-593	+476	-2 313	+2 313
+3 213	-1 838	-92	-873	-410	-679	+930	-2 029	+2 380	-366	-236	-236
+4 075	-1 887	-235	-47	+1 906	+2 749	-1 049	+1 283	+2 443	-2 441	+2 986	-2 986
+3 858	-2 351	+89	+276	+1 872	+1 764	+1 083	+121	+2 531	-276	+5 222	-5 222
+2 495	-1 185	-603	+1 475	+2 182	+1 084	+426	-128	-2 186	-336	-1 140	+1 140
-3 659	-2 115	-933	-276	+335	+596	+300	+1 718	-702	-295	+2 208	-2 208
+3 173	-1 855	+336	-31	+1 623	+535	-533	-1 058	+2 208	-65	+2 153	-2 153
+3 023	-2 632	+354	+3 139	+3 884	+3 076	+836	-1 714	+1 911	-1 881	+2 228	-2 228
+2 139	-1 557	+263	-626	+219	-7	-74	-427	-1 400	+342	-1 566	+1 566
+3 535	-2 211	+386	-642	+1 068	-1 510	-855	+1 137	+2 548	-390	+930	-930
+3 954	-3 377	+222	-44	+755	-2 271	+1 971	+651	-3 085	-429	-3 162	+3 162
+4 480	-2 990	-67	-54	+1 369	+1 195	-3 772	+1 956	-3 790	+1 175	-3 236	+3 236

Assets: increase -, decrease +. Liabilities: increase +, decrease -

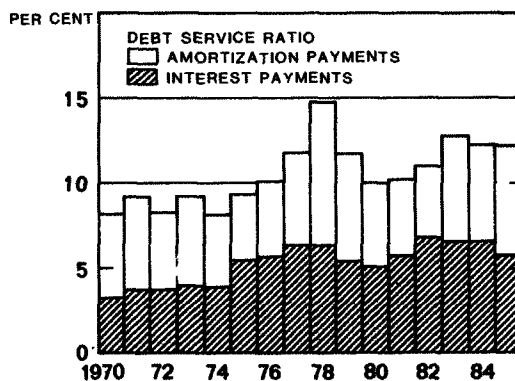
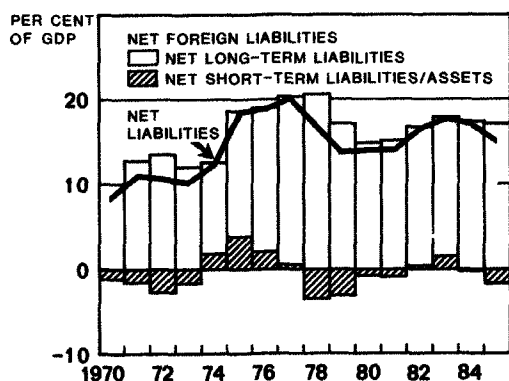


FINLAND'S FOREIGN ASSETS AND LIABILITIES

End of year and month	Long-term assets				Long-term liabilities						Net long-term liabilities (10-4)
	Export credits	Direct investment	Other	Total (1 to 3)	Financial loans	Import credits	Direct investment	Portfolio investment	Other	Total (5 to 9)	
	1	2	3	4	5	6	7	8	9	10	11
1982	6 628	4 626	3 796	15 050	47 547	4 608	2 223	..	752	55 130	40 080
1983	6 612	6 166	3 932	16 710	53 118	4 472	2 317	848	763	61 518	44 808
1984	8 920	8 689	1 915	19 524	63 958	3 865	2 905	2 013	805	73 546	54 022
1985*	6 538	10 516	2 774	19 828	63 197	2 892	3 274	6 313	1 065	76 741	56 913
1983											
Sept.	6 411	5 392	3 935	15 738	50 705	4 566	2 303	..	798	58 372	42 634
Dec.	6 612	6 166	3 932	16 710	53 118	4 472	2 317	848	763	61 518	44 808
1984											
March	6 658	6 687	3 539	16 884	54 014	4 225	2 354	987	731	62 311	45 427
June	6 827	7 435	3 230	17 492	57 198	3 937	2 393	1 640	729	65 897	48 405
Sept.	7 767	7 834	1 839	17 440	60 497	3 951	2 410	1 957	834	69 649	52 209
Dec.	8 920	8 689	1 915	19 524	63 958	3 865	2 905	2 013	805	73 546	54 022
1985*											
March	8 504	9 408	2 071	19 983	64 521	3 939	2 899	2 900	778	75 037	55 054
June	8 034	9 824	2 195	20 053	64 822	3 602	2 763	6 317	873	78 377	58 324
Sept.	7 200	10 290	2 179	19 669	63 388	3 064	2 809	6 210	867	76 338	56 669
Dec.	6 538	10 516	2 774	19 828	63 197	2 892	3 274	6 313	1 065	76 741	56 913
1986*											
March	6 300	10 572	2 712	19 584	63 503	2 803	3 348	6 407	993	77 054	57 470
June	6 133	11 343	2 783	20 259	66 535	2 546	3 391	7 117	1 012	80 601	60 342



Short-term assets				Short-term liabilities				Net short-term liabilities (19-16)	Net liabilities (11+20)	Debt service, flow	Of which amortization payments, flow
Bank of Finland	Authorized banks and other foreign exchange holders	Corporate sector	Total (12 to 14)	Bank of Finland	Authorized banks and other foreign exchange holders	Corporate sector	Total (16 to 18)				
12	13	14	15	16	17	18	19	20	21	22	23
12 737	22 899	13 858	49 494	5 348	31 331	13 782	50 461	967	41 047	9 069	3 464
11 842	29 263	15 915	57 020	5 705	39 443	16 181	61 328	4 308	49 116	11 591	5 621
22 912	43 319	12 804	79 035	4 562	55 695	17 988	78 245	-790	53 232	12 877	5 896
25 183	38 760	13 084	77 027	4 070	51 374	15 999	71 443	-5 584	51 329	13 459	7 024
10 556	23 605	15 681	49 841	4 737	31 289	16 805	52 831	2 989	45 623	2 542	1 049
11 842	29 263	15 915	57 020	5 705	39 443	16 181	61 328	4 308	49 116	2 726	1 387
14 740	25 724	15 374	55 838	3 657	37 966	15 571	57 193	1 355	46 782	3 523	1 452
20 705	31 935	14 978	67 618	3 775	47 084	16 836	67 694	76	48 481	3 260	1 987
21 064	34 621	14 727	70 411	4 815	47 882	17 431	70 128	-283	51 926	2 448	821
22 912	43 319	12 804	79 035	4 562	55 695	17 988	78 245	-790	53 232	3 646	1 636
24 785	44 984	13 827	83 596	4 535	59 386	18 362	82 283	-1 313	53 741	3 639	1 802
26 208	46 661	14 868	87 737	3 729	62 896	18 727	85 352	-2 385	55 939	3 780	2 029
24 770	44 927	14 573	84 271	4 240	59 370	17 808	81 418	-2 853	53 816	2 793	1 488
25 183	38 760	13 084	77 027	4 070	51 374	15 999	71 443	-5 584	51 329	3 247	1 705
21 647	40 409	12 115	74 171	3 659	50 424	17 585	71 668	-2 503	54 967	5 097	3 485
18 470	48 448	9 637	76 555	3 499	54 673	13 357	71 529	-5 025	55 317	5 260	3 236



PRICE INDICES

Period	Wholesale price index 1949 = 100	Basic price index for domestic supply 1980 = 100						Building costs 1980 = 100		
		Total	Origin		Purpose			Total	Wages in building trade	Building materials
			Domestic goods	Imported goods	Raw materials	Consumer goods	Investment goods			
	1	2	3	4	5	6	7	8	9	10
1984	1 261	134.5	136.0	130.0	132.6	137.5	135.8	136.5	133.7	136.1
1985	1 324	140.5	143.1	132.8	137.5	145.8	142.4	144.3	144.4	142.8
1986										
Feb.	1 297	137.0	142.9	119.2	129.1	147.3	146.1	148.5	151.0	146.6
March	1 279	135.0	141.6	115.2	125.5	146.7	147.0	148.8	151.0	146.7
April	1 265	133.6	140.5	112.5	123.0	146.2	147.3	149.3	151.5	147.3
May	1 257	132.6	139.3	112.1	121.3	145.8	147.2	149.8	151.6	147.8
June	1 256	132.4	139.3	111.2	120.9	145.5	147.7	150.8	155.6	148.2
July	1 249	131.7	139.2	108.8	119.4	145.1	148.9	151.2	156.2	148.4
Aug.	1 246	130.9	137.9	109.6	113.3	144.3	148.7	151.5	156.2	149.0
Sept.	1 248	131.3	138.0	111.0	118.7	144.7	149.2	151.8	156.2	149.5

Period	Consumer prices 1981 = 100									
	Total	Food	Beverages and tobacco	Clothing and footwear	Rent, heating and lighting	Household goods and services	Health and medical services	Transport and communication	Education and recreation	Other goods and services
	1	2	3	4	5	6	7	8	9	10
1984	127.1	129.1	132.5	119.5	124.5	123.0	145.2	125.4	126.4	130.8
1985	134.6	139.1	140.3	126.1	130.9	129.7	155.7	130.4	132.5	140.4
1986										
Feb.	137.8	142.1	144.7	128.4	133.7	133.3	162.6	130.9	136.1	147.2
March	138.1	143.2	144.7	130.8	133.6	133.6	162.6	129.9	136.2	147.4
April	138.6	144.2	144.9	131.3	133.6	134.2	162.8	130.4	137.6	147.6
May	139.1	143.9	145.1	131.8	135.7	134.8	162.3	129.2	139.4	148.3
June	139.8	144.9	147.4	131.6	135.7	135.1	162.9	130.2	140.1	148.9
July	139.9	145.7	147.4	130.1	135.7	135.1	163.0	130.4	140.2	149.0
Aug.	140.2	144.8	147.4	131.4	136.3	135.3	164.4	130.2	141.2	150.2
Sept.	140.2	144.9	147.4	133.0	134.2	136.0	164.4	131.4	142.3	150.3

WAGES

Index of wage and salary earnings 1980 = 100

Period	By industries			By institutional sectors			All salary earners	All wage earners	All employees	
	Wage earners in			Employees in services	State employees	Municipal employees				Employees in private sector
	Agriculture	Industry	Construction							
1	2	3	4	5	6	7	8	9	10	
1983	132.1	137.3	138.2	138.8	137.3	140.0	137.3	138.4	136.9	137.8
1984	148.5	149.9	152.8	152.8	147.1	154.7	150.5	151.4	149.7	150.8
1985*	160.6	161.2	168.8	165.0	158.9	166.1	163.5	164.1	162.2	163.4
1985*										
Apr.-June	163.2	162.8	168.6	166.2	160.3	167.0	164.9	165.3	163.6	164.7
July-Sept.	161.9	162.0	168.2	166.4	160.1	167.2	164.7	165.7	162.6	164.6
Oct.-Dec.	166.8	163.1	174.0	166.9	160.6	167.7	167.1	166.9	165.3	166.3
1986*										
Jan.-March	170.2	166.8	175.5	173.2	166.7	174.5	169.5	171.3	167.9	170.0
Apr.-June	175.0	172.7	183.9	177.4	169.9	178.3	175.5	175.7	174.5	175.3

PRODUCTION

Volume indices of production 1980 = 100

Period	Gross domestic product	Industrial production	Agriculture	Forestry	Construction of buildings	Land and waterway construction	Transport and communication	Commerce	Public sector services	Others
1984										
Apr.-June	109	114	83	89	85	104	110	108	114	121
July-Sept.	109	102	198	45	114	105	108	110	115	119
Oct.-Dec.	121	122	92	117	140	108	121	119	116	127
1985*										
Jan.-March	107	112	74	102	81	94	106	100	117	117
Apr.-June	113	121	78	109	85	113	111	112	117	126
July-Sept.	112	106	178	37	109	114	111	113	118	124
Oct.-Dec.	123	124	85	110	140	116	125	124	120	132
1986*										
Jan.-March	108	108	72	96	80	97	110	103	120	122
Apr.-June	114	121	78	90	71	117	113	118	118	131

PRODUCTION

Index of industrial production 1980 = 100

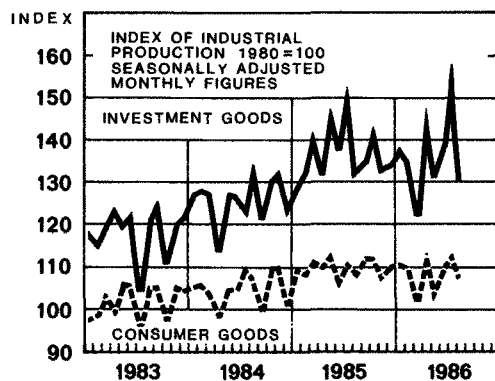
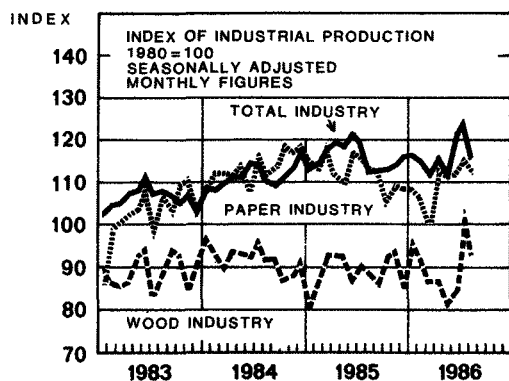
Period	Total	Investment goods	Consumer goods	Other producer goods	Special indices of manufacturing						Total adjusted for seasonal variations
					Food industry	Wood industry	Paper industry	Chemical industries	Non-metallic mineral industry	Metal industry	
	1	2	3	4	5	6	7	8	9	10	11
1983	107.1	119.0	102.6	107.1	108.9	89.9	103.5	106.2	115.0	114.5	107.1
1984*	111.8	126.8	105.6	111.9	109.3	92.4	114.3	111.5	108.4	120.0	112.1
1985*	116.1	137.8	110.3	114.7	111.3	89.4	113.1	115.1	109.7	129.9	116.5

1985*

Aug.	114.8	125.9	110.0	114.7	114.8	83.1	118.8	121.5	128.0	121.9	112.8
Sept.	118.8	137.4	113.4	117.7	109.5	96.5	112.0	121.0	130.4	134.1	113.1
Oct.	129.7	157.4	126.3	126.1	138.6	109.6	112.2	127.4	135.4	149.9	113.5
Nov.	124.5	148.9	122.2	120.9	130.4	96.7	116.8	117.1	118.6	142.5	114.5
Dec.	108.0	130.9	104.2	105.4	104.7	63.2	102.8	108.3	95.9	123.6	116.6

1986*

Jan.	122.4	143.3	119.8	119.7	106.8	93.6	111.2	121.9	103.0	137.5	116.9
Feb.	110.5	132.8	108.0	107.5	93.1	82.9	102.2	111.0	83.3	123.9	115.4
March	107.5	127.0	104.0	105.5	91.3	83.6	95.2	121.8	81.6	121.3	112.4
April	124.7	157.7	117.6	121.9	114.4	113.5	114.7	133.4	98.5	148.9	116.5
May	118.2	151.5	109.6	115.1	104.7	100.1	107.4	121.5	98.5	147.1	112.6
June	117.8	151.5	104.1	118.1	105.1	97.4	101.5	113.9	102.9	141.1	121.2
July	86.7	71.3	75.3	94.6	103.4	47.2	126.8	83.7	73.4	73.2	124.8
Aug.	114.4	123.0	108.6	115.3	107.0	83.0	117.0	123.3	121.1	121.1	116.0



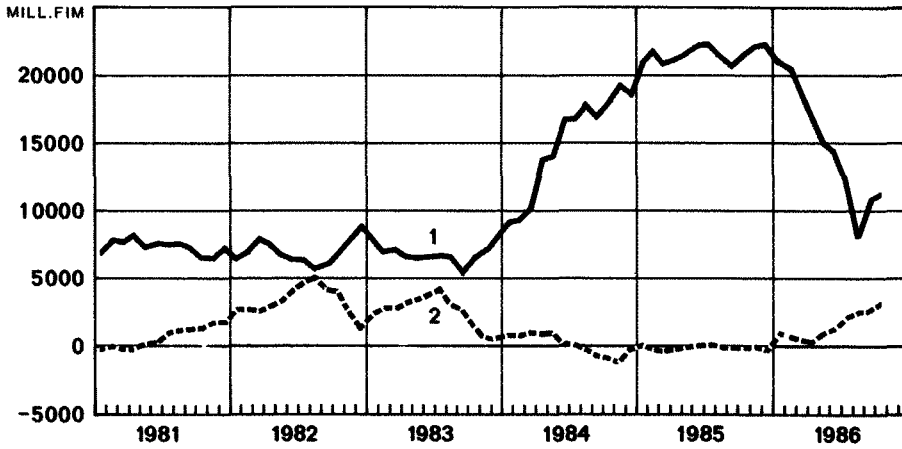
LABOUR – TIMBER FELLINGS – INTERNAL TRADE

Period	Population of working age, 1 000 persons	Total labour force, 1 000 persons	Employed, 1 000 persons	Jn-employed, 1 000 persons	Unemployment, % of total labour force	Commercial timber fellings, 1 000 solid cu. m	Retail sales volume index 1980 = 100	Wholesale volume index 1980 = 100
	1	2	3	4	5	6	7	8
1984	3 700	2 572	2 414	159	6.2	41 288	109	109
1985*	3 710	2 600	2 437	163	6.3	43 349	114	110
1985*								
July	3 708	2 780	2 621	159	5.7	1 121	120	95
Aug.	3 712	2 631	2 481	150	5.7	1 212	117	112
Sept.	3 714	2 563	2 405	158	6.2	1 951	111	113
Oct.	3 714	2 556	2 396	160	6.3	2 962	118	124
Nov.	3 714	2 580	2 409	171	6.6	3 768	115	119
Dec.	3 714	2 563	2 406	157	6.1	4 729	134	119
1986*								
Jan.	3 714	2 553	2 360	193	7.6	4 232	110	103
Feb.	3 715	2 540	2 346	195	7.7	4 596	100	102
March	3 716	2 551	2 365	186	7.3	4 709	105	109
April	3 716	2 551	2 365	186	7.3	4 534	118	123
May	3 718	2 609	2 438	170	6.5	3 292	122	120
June	3 717	2 788	2 598	190	6.8	2 472	119	111
July	3 717	2 790	2 600	190	6.8	1 124	126	104
Aug.	3 718	2 647	2 481	167	6.3	1 194

CONSTRUCTION OF BUILDINGS

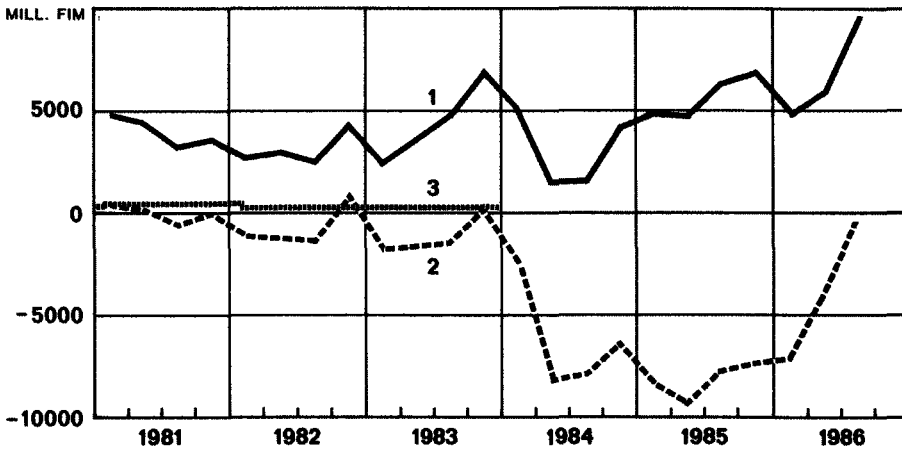
Period	Building permits granted					Buildings completed					Building-works under construction
	Total	Residential buildings	Farm buildings	Industrial and business buildings	Public buildings	Total	Residential buildings	Farm buildings	Industrial and business buildings	Public buildings	
Million cubic metres											
	1	2	3	4	5	6	7	8	9	10	11
1984	49.69	19.93	5.65	17.45	3.14	44.24	17.65	5.13	15.76	2.83	52.13
1985*	48.17	18.17	6.70	16.53	3.41	44.74	17.40	4.94	15.97	3.35	49.64
1985*											
Jan.-March	9.19	3.44	1.10	3.20	0.86	8.62	3.85	0.56	2.92	0.73	47.81
Apr.-June	17.13	7.27	3.09	4.80	0.75	10.18	4.08	0.72	3.57	1.05	53.07
July-Sept.	12.16	4.48	1.61	4.21	0.92	10.10	3.80	1.77	3.04	0.75	56.42
Oct.-Dec.	9.69	2.98	0.90	4.32	0.88	15.84	5.67	1.89	6.44	0.82	49.64
1986*											
Jan.-March	9.24	2.96	1.19	4.06	0.50	8.15	3.53	0.56	2.89	0.67	46.75
Apr.-June	16.42	6.67	2.93	4.68	0.89	4.74	2.05	0.65	1.37	0.36	55.87

BANK OF FINLAND'S CONVERTIBLE AND TIED FOREIGN EXCHANGE RESERVES, 1981-86



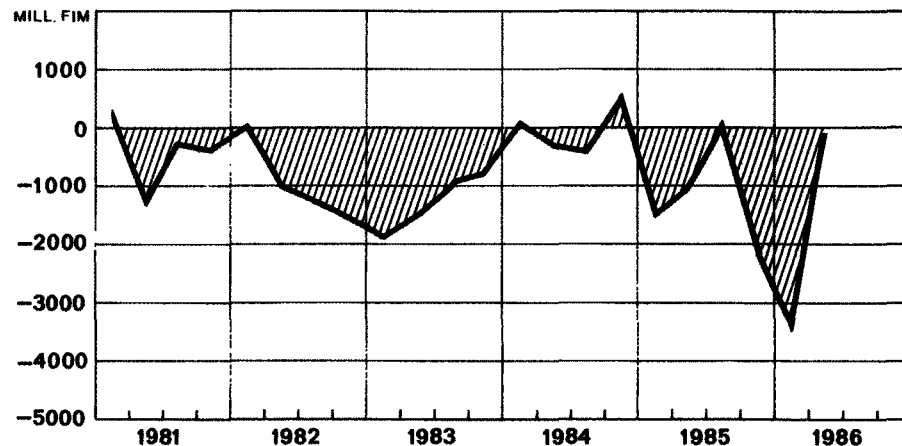
- 1. Gold and convertible currencies
- 2. Tied currencies

DEPOSIT BANKS' CENTRAL BANK POSITION, 1981-86



- 1. Gross central bank debt
 - 2. Net central bank debt
 - 3. Quotas
- Quarterly average of daily amounts (1 and 2)

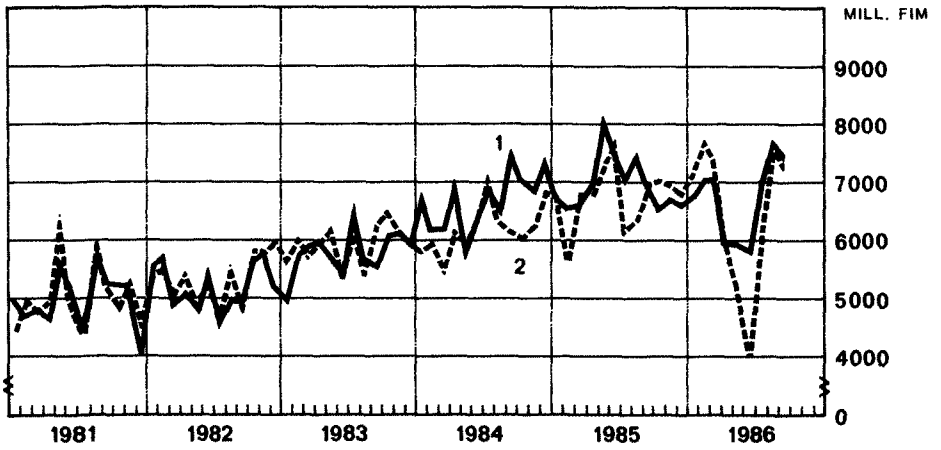
BALANCE OF PAYMENTS CURRENT ACCOUNT SURPLUS/DEFICIT, 1981-86



Seasonally adjusted quarterly figures

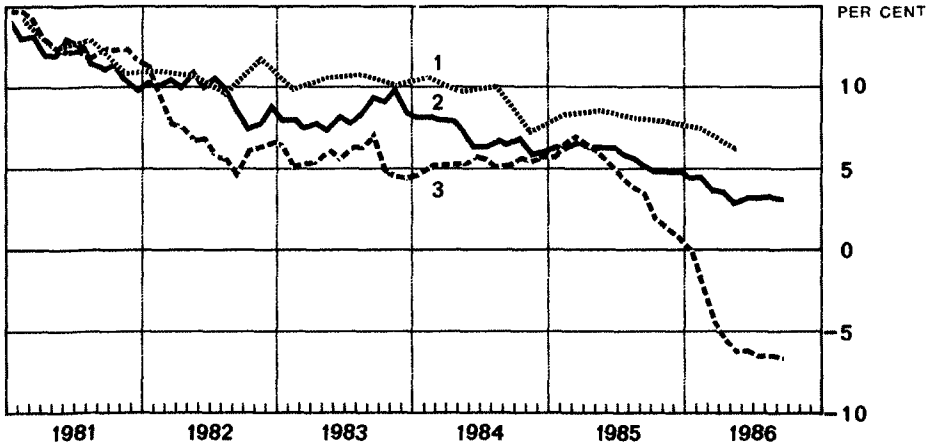
FOREIGN TRADE, 1981-86

- 1. Exports f.o.b.
 - 2. Imports c.i.f.
- Seasonally adjusted monthly figures



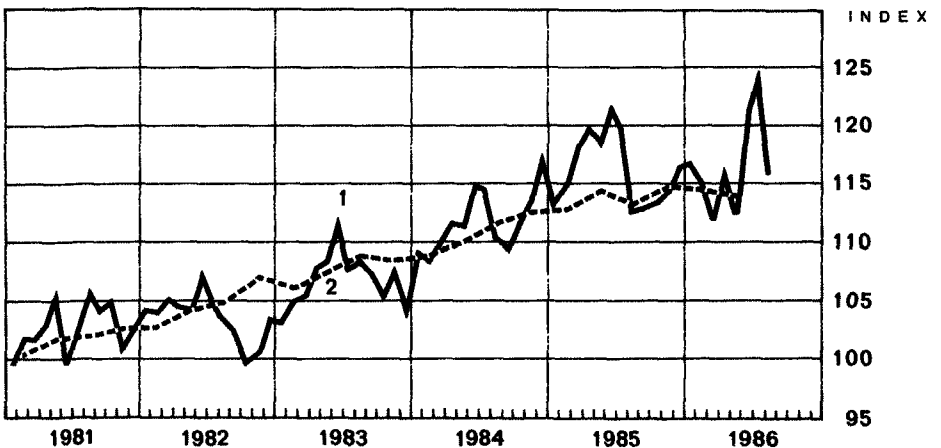
PRICES AND WAGES, 1981-86

- 1. Index of wage and salary earnings 1980 = 100, quarterly figures
 - 2. Consumer price index 1981 = 100, monthly figures
 - 3. Basic price index for domestic supply 1980 = 100, monthly figures
- Percentage change on previous year



PRODUCTION, 1981-86

- 1. Total index of industrial production 1980 = 100, seasonally adjusted monthly figures
- 2. Volume index of gross domestic product 1980 = 100, seasonally adjusted quarterly figures



EXPLANATIONS RELATING TO THE STATISTICAL SECTION

BANK OF FINLAND

Page 4. *Public sector*: Claims = Government promissory notes + Bonds + Total coinage + Other claims on the public sector. Other liabilities = Cheque accounts + Counter cyclical reserves + Counter-cyclical deposits + Capital import deposits - Other liabilities to the public sector. Certificates of deposit are interest bearing, freely transferable term liabilities of the Bank of Finland sold to the government. Their maturities range from one week to one year. As from November 1, 1983, certificates of deposit were replaced by the government deposit account.

Page 5. *Domestic financial sector*: Other liabilities, net = Capital import deposits + Other liabilities to financial institutions - Bonds - Other claims on financial institutions.

Corporate sector: *Permanent special financing schemes* = Foreign bills + New export bills + Financing of suppliers' credits. Liabilities, net = Deposits for investment and ship purchase + Counter-cyclical withholdings + Capital import deposits + Import levy deposits + Export deposits - Other liabilities to corporations - Bonds - Other claims on corporations.

MONETARY POLICY INDICATORS

Page 6. All the figures except the average lending rate of the commercial banks are mean values of daily figures for the month or year in question. The average lending rate of the commercial banks is the mean value of the end of the month lending rates weighted by credit outstanding. The annual figure for the average lending rate is an unweighted average of the weighted average monthly rates.

Gross central bank debt of the deposit banks = The commercial banks' and Postipankki's cheque account overdrafts + Call money credit. Prior to January 1984 the average monthly amount of cheque account overdrafts at base rate was restricted by the quota granted to each bank. The banks could obtain central bank credit in excess of the quota by borrowing on the Bank of Finland's call money market. As from January 1984, the quotas were abolished and the only source of central bank debt is now the call money market. There is no longer any absolute ceiling on call money credit. However, banks' borrowing is monitored and a bank whose borrowing exceeds a certain limit comes under the special surveillance of the central bank. The interest charged on call money credit, the call money rate, is adjusted by the central bank in line with monetary policy objectives at the time.

Net central bank debt of the deposit banks = Gross central bank debt of the deposit banks - The commercial banks' and Postipankki's deposits on the call money market - All deposit banks' cash reserve deposits at the Bank of Finland.

Cash reserve deposits of the deposit banks equal the total amount of cash reserve deposits at the Bank of Finland made by the deposit banks under the Cash Reserve Agreement of March 8, 1983. The deposit banks consist of the commercial banks, co-operative banks, savings banks and Postipankki.

The cash reserve requirement is set each month by the Bank of Finland as the percentage of each bank's stock of deposits which must be deposited at the central bank. Deposits are to be made one month after the close of the month to which the coefficient applies.

Call money credit extended by the Bank of Finland = Demand for call money by the deposit banks - Supply of call money by the deposit banks.

As from the beginning of 1986, the call money interest rate was differentiated into two separate rates of interest, the rate on call money advances and a slightly lower one, the rate on call money deposits. As from the beginning of 1986, the figures on page 6 and the chart illustrating the call money rate have been prepared on the basis of the rate on call money advances.

Average cost of gross central bank debt = Costs of borrowing paid to the Bank of Finland by the deposit banks, as a percentage of their gross central bank debt, per annum.

FORWARD EXCHANGE MARKETS IN FINLAND

Page 7. The figures for columns 1-6 are calculated by the Bank of Finland on the basis of monthly reports from the banks on their outstanding forward exchange positions at the end of each month. The figures for columns 7-9 are based on monthly averages of daily representative quotations, as reported by the banks to the Bank of Finland.

The banks' foreign currency positions shown in the chart at the bottom of page 7 are monthly averages of daily spot and forward positions vis-à-vis the marka as reported by the commercial banks to the Bank of Finland. The spot position includes all foreign currency-denominated assets and liabilities of the banks, excluding their outstanding forward contracts.

FOREIGN EXCHANGE RATES

Pages 8-9. *Exchange rates* are annual and monthly averages of the Bank of Finland's daily quotations. *Currency index* is annual and monthly average of daily index numbers. The chart at the bottom of page 8 shows the banks' forward selling rates for the US dollar as deviations from the spot rate.

DEPOSITS BY THE PUBLIC - ADVANCES TO THE PUBLIC - MONEY SUPPLY

Figures for deposits and advances are supplied by the Central Statistical Office.

Page 10. *Deposits by the public*. The central government and the financial institutions are mainly excluded from the public. From 1974 deposits include domestic deposits denominated in foreign currency.

Page 11. *Advances to the public*. The central government and the financial institutions are not included in the public.

Postipankki's advances do not include loans granted by the State Investment Fund (INRA). Domestic credits in foreign currency are mainly granted by the commercial banks and the rest by Postipankki.

Money Supply M₁ = Finnish notes and coins in circulation - Finnish notes and coins held by the banks + Demand deposits held by the public (incl. Demand deposits at the Bank of Finland). Quasi-Money = Time deposits held by the public (incl. Time deposits at the Bank of Finland).

Note: Domestic deposits in foreign currency included in money supply since 1974. In the money supply the public includes non-monetary financial institutions.

STATE FINANCES

Page 12. Official figures computed by the Economics Department of the Ministry of Finance. Revenue and expenditure: Extra-budgetary funds and the aggregated net current deficit of State enterprises are included. Figures are reported on a cash payment basis.

FOREIGN TRADE

Pages 13-15. Figures supplied by the Board of Customs. *Indices* (p. 13): The volume indices are calculated according to the Paasche formula and the unit value indices according to the Laspeyres formula. *Terms of trade*: the ratio of export indices to import indices. *Foreign trade by countries*: (p. 15): from January 1980 imports by countries of origin, exports by countries of consignment.

BALANCE OF PAYMENTS

Pages 16-17. Figures are calculated by the Bank of Finland.

Columns 1-7. The figures for the trade and goods and services accounts are in accordance with the System of National Accounts.

Columns 12-13. Long-term loans comprise financial loans and import and leasing credits.

Column 15. Miscellaneous long-term capital items, net = direct investment, net + portfolio investment by foreigners + financial loans and development credits to abroad + Finland's subscriptions to international financial institutions, net.

Column 23. Changes in the foreign exchange reserves of the Bank of Finland exclude changes in the marka value of the reserves caused by changes in exchange rates.

FOREIGN ASSETS AND LIABILITIES

Pages 18-19. Figures calculated by the Bank of Finland.

Long-term assets: Other = financial loans + development credits + Finland's subscriptions to international financial institutions. Long-term liabilities: Portfolio investment = the outstanding amount of share issues by Finnish companies on foreign stock exchanges and of securities sold to foreign buyers through the Helsinki Stock Exchange. Other = Leasing credits + subscriptions to international financial institutions paid in the form of bonds.

Column 22. Debt service = Net investment income of short-term and long-term assets and liabilities + net amortisation payment of long-term foreign assets and liabilities, excl. amortisation payments of the Bank of Finland's reserve and oil credits.

Columns 22 and 23 during the year and the quarter.

Chart Debt service ratio: Debt service as a per cent of current account earnings. Debt service does not include amortisation of the Bank of Finland's reserve and oil credits.

PRICE INDICES

Page 20. All indices calculated by the Central Statistical Office.

WAGES - PRODUCTION

Pages 21-22. Figures supplied by the Central Statistical Office.

Page 22. *Index of industrial production* calculated by the Central Statistical Office. The grouping, by branches of industry is in accordance with the Standard Industrial Classification (SIC) which is a version of the 1968 edition of the ISIC. The SIC facilitates international comparisons between Finnish statistics and corresponding data from countries which use the ISIC. The seasonally adjusted series is calculated by the Bank of Finland on the basis of the index of industrial production per working day according to a method resembling the U.S. Bureau of Census Method II.

LABOUR - TIMBER FELLINGS - INTERNAL TRADE - CONSTRUCTION OF BUILDINGS

Page 23. *Labour* figures supplied by the Central Statistical Office. *Commercial timber fellings* compiled by the Forest Research Institute. *Retailers' and Wholesalers' volume indices* supplied by the Central Statistical Office. *Construction of buildings* figures calculated by the Central Statistical Office.

Owing to rounding, the figures in statistical tables do not necessarily add up to the totals shown.

SYMBOLS USED: * Preliminary, r Revised, 0 Less than half the final digit shown, . Logically impossible, . Not available, - Nil, S affected by strike, - Break in series.

SOME PARTICULARS ABOUT FINLAND

FORM OF GOVERNMENT

From 1155 to 1809 Finland formed a part of the kingdom of Sweden. Connected from 1809 with Russia, Finland was an autonomous country with the Emperor as Grand Duke until December 6, 1917, the date of Finland's declaration of independence. The republican constitution was adopted in 1919. The legislative power of the country is vested in Parliament and the President. The highest executive power is held by the President, elected for a period of 6 years. The President for the current term, January 27, 1982, to March 1, 1988, is Mauno Koivisto.

Parliament, comprising 200 members is elected by universal suffrage for a period of 4 years. The number of seats of the different parties in Parliament elected in 1983 is as follows: Social Democratic Party of Finland 57, National Coalition Party 44, Centre Party 38, Democratic League of the People of Finland 27, Finnish Rural Party 17, Swedish People's Party 11, Christian League of Finland 3, The Greens 2 and Finnish People's Constitutional Party 1.

Finland is divided into 461 self-governing municipalities. Members of the municipal council are elected by universal suffrage for a period of 4 years.

INTERNATIONAL ORGANIZATIONS

Finland became a member of BIS 1930, IMF 1948, IBRD 1948, GATT 1950, UN 1955, IFC 1956, IDA 1960, EFTA 1961, ADB 1966, OECD 1969, IDB 1977 and AfDB 1982.

LAND

THE AREA is 338 000 square kilometres (Great Britain's area is 244 000 sq. km and Italy's area 301 000 sq. km). Of the total, inland waters form 9.4%. Of the land area (1980) 2.5 mill. ha (8.2%) are cultivated and 19.7 mill. ha (64.5%) are covered by forests.

OWNERSHIP OF LAND (1979). The total land area was distributed among different classes of owners approximately as follows: private 58.7%, State 31.4%, joint stock companies etc. 7.4%, municipalities and parishes 2.5%.

POPULATION

NUMBER OF INHABITANTS (1984): 4.9 million. Sweden 8.3, Switzerland 6.5, Denmark 5.1, and Norway 4.1 million.

DENSITY OF POPULATION (1984): In South Finland 47.7, in East and Central Finland 14.3, in North Finland 4.2 and in the whole country an average of 16.1 inhabitants to the square kilometre.

DISTRIBUTION BY AREA (1984): 40% of the population inhabit the rural areas, 60% towns. The largest towns are: Helsinki (Helsingfors), the capital, 484 263 inhabitants, Tampere (Tammerfors) 168 150, Turku (Åbo) 162 282.

EMPLOYMENT (1985): Agriculture and forestry 11%, industry and construction 32%, commerce 15%, transport and communication 8%, financing, insurance, real estate and business services 6%, community and personal services 28%.

LANGUAGE (1984): Finnish speaking 93.6%, Swedish speaking 6.1%, others 0.3%.

EDUCATION (1986): Practically all persons over 15 years of age are literate. There are 8 universities (the oldest founded in 1640) and 12 colleges of university standard.

CHANGE OF POPULATION (1984): births 13.3 ‰, deaths 9.2 ‰, change - 5.0 ‰, net immigration + 0.8 ‰. Deaths in France 9.8 ‰ and Great Britain 11.4 ‰.

TRADE AND TRANSPORT

NATIONAL INCOME (1985), in million FIM: Gross domestic product: at factor cost by industrial origin: agriculture and fishing 13 190 (4%), forestry 10 977 (4%), manufacturing 95 794 (29%), construction 23 138 (8%), trade, restaurants and hotels 33 163 (11%), transport and communication 23 672 (8%), banking and insurance 12 973 (4%), ownership of dwellings 19 097 (6%), other services 74 707 (25%), total 296 711. Index of real domestic product 114 (1980 = 100).

FOREST RESOURCES (1983). The growing stock comprised of 1 660 million m³ (solid volume with bark; of which 45% was pine and 37% spruce the remaining 18% being broad-leaved trees chiefly birch). Of the growing stock 656 million m³ was up to the standard required for logs, 51% of these being pine. The annual growth was 68 million m³ and the total drain calculated on the basis of roundwood consumption was 49.4 million m³.

AGRICULTURE (1983). Cultivated land 2.4 million hectares. Number of holdings 208 229 of which 146 465 are of more than 5 ha. Measure of self-sufficiency in bread cereals 93%.

INDUSTRY (1983). Gross value of industrial production FIM 222 602 mill., number of workers 398 066, salaried employees 146 503, motive power 8.3 mill. kW. Index of industrial production 107.1 for 1983 (1980 = 100).

STATE RAILWAYS (Dec. 31, 1985): Length 5979 km.

MERCHANT FLEET (Sept. 30, 1986): Passenger vessels 164 (294 305 gross reg. tons), tankers 33 (604 653 gross reg. tons), dry cargo vessels 125 (479 391 gross reg. tons), other vessels 105 (21 440 gross reg. tons), total 427 (1 399 789 gross reg. tons).

AUTOMOBILES (Dec. 31, 1985): Passenger cars 1 546 094, lorries and vans 179 637, buses 9017 other automobiles 11 867, total 1 746 615.

FINNISH AIRLINES (Feb. 28, 1985). Finnair has in use 1 DC-8-62, 3 DC-9-10, 5 DC-9-41, 12 DC-9-51, 3 DC-9 Super 82, 3 DC-10-30, 1 DC-10-30 ER and 3 Fokker F-27 Friendship MK. The company has scheduled flights to 34 foreign and 21 domestic destinations.

FINANCE AND BANKING

CURRENCY. Since 1860, Finland has had its own monetary system. From 1877 until 1914 the country was on the gold standard, and returned to it in 1926. In 1931, the Central Bank's duty to redeem bank notes in gold was suspended and at the end of 1962 was entirely cancelled. The monetary unit is the markka (plural: markkaa), which is divided into 100 penniä (singular: penni). The abbreviation used for the markka is FIM. The last par value of the markka was set on Oct. 12, 1967 and was 0.21159 grams of fine gold per markka (equivalent, at the time, to 4.20 markkaa per U.S. dollar). Since Nov. 1, 1977 the external value of the markka has been officially expressed in terms of a currency index. This index is tradeweighted and as from Jan. 1, 1984 indicates the average change in the convertible currencies which are important in Finnish foreign trade. The present currency weights are SEK 20.2, DEM 19.3, GBP 14.6, USD 9.4, other currencies 36.5. The permissible range of fluctuation is about 2.25 per cent on either side of the theoretical arithmetic mean. The fluctuation limits are 106.0 and 101.3.

THE CENTRAL BANK. The Bank of Finland (estab. 1811) functions under the guarantee and supervision of Parliament. Its Board of Management is appointed by the President of the Republic; the Bank Supervisors, nine in number, are elected by Parliament. The Bank has a head office in Helsinki and 12 branches in other towns.

OTHER CREDIT INSTITUTIONS (Dec. 31, 1985). There are two big and eight small commercial banks with in all 967 offices, 254 savings banks, 370 co-operative banks, six mortgage banks, Postipankki and three development credit institutions. The co-operative stores accept deposits from their members. The Social Insurance Institution and 48 private insurance companies also grant credits.

RATES OF INTEREST (May 19, 1986). The Bank of Finland's base rate is 7%. The interest rates for domestic lending other than bank financing by the Bank of Finland vary between 4½% and 9½%. Other credit institutions: time deposits 2%, 6 month deposits 4%, 12 month deposits 5%, 24 month deposits 7%.



Rolf Kullberg

THE BANK OF FINLAND AND THE DEVELOPMENT OF FINNISH FINANCIAL MARKETS

by Rolf Kullberg
Governor of the Bank of Finland

The Bank of Finland celebrates its 175th anniversary at a time when the environment in which it operates is undergoing far-reaching change. Financial markets in Finland have become more open with respect to foreign countries. Competition and yield awareness have clearly increased, and, with the decline in the role of regulation, finance is to an ever-increasing extent being intermediated on terms dictated by market forces. In addition, entirely new vistas have been opened up in payments techniques.

The background to these changes is the general integration of the Finnish economy with world markets. Increased interest rate and exchange rate volatility and unprecedented advances in telecommunications have been major factors making for structural change. These forces have also been at work in most other western industrial countries. To some extent, the onset of this process in Finland has depended on the deliberate choice of the Bank of Finland, which, rather than opposing the changes, has sought - in keeping with its primary function as the country's central bank

- to ensure that development has proceeded without jeopardizing the stability of financial markets.

This is not the first time that a fundamental transformation has occurred in the Bank of Finland's sphere of activity. Looking back over the Bank's 175 years' history, one soon realizes that its current role and forms of activity are the sum total of a whole series of periods of profound change touching upon both the conditions in which monetary policy has been conducted in Finland and the methods of monetary control applied.

THE COUNTRY'S FIRST BANK

After Russia's conquest of Finland from Sweden, the country was annexed to the Russian Empire as an autonomous grand duchy in 1809. The Swedish Riksbank, which is the world's oldest central bank, already had a long history behind it at that time. The Diet (the Four Estates) petitioned the Tsar for the foundation in the new state of a national note-issuing bank on the Swedish model to be

AN INDEPENDENT CENTRAL BANK

placed under the administration of the Estates. Alexander I considered the proposal too radical. However, to displace the Swedish currency that was still in general circulation in the country, in 1811 he set up an "Office of Exchange, Lending and Deposits in the Grand Duchy of Finland", which was subject to the imperial government - the Senate - of Finland. It was this institution which was to develop into the present Bank of Finland. The Bank of Finland was also autonomous Finland's first bank, for it was not until 1822 that the first savings bank was founded in Turku. Initially, however, the Bank's note-issuing right was so small that its kopeck, and later rouble, denominated notes were insufficient to drive the Swedish notes out of general circulation.

Thus, during the first decades of its existence, the Bank was unable to fulfil its task of establishing a uniform monetary standard for the country. The main emphasis of its business was on the management of government funds and lending on a modest scale. Although the motives for the foundation of the Bank were clearly consistent with contemporary ideas of a central bank, the Bank's entire 19th century history can be seen as a process of maturing into an independent central bank in charge of a national banking system. To a very large degree, this development was the outcome of three periods of fundamental change.

It was with the monetary reform of 1840 that the Bank of Finland became a note-issuing bank responsible for the country's monetary transactions. Following the decisions of Sweden and Russia to restore the convertibility of their notes into silver, the Bank of Finland finally succeeded in exchanging the Swedish riksdalers circulating in Finland for its own rouble notes. In the same context, rights typical of a fully-fledged national note-issuing bank were obtained for their issue. Within a few years, the first contacts with foreign correspondents were established and the discounting of foreign bills was started, which greatly facilitated Finland's foreign trade. Thus the prerequisites for the pursuit of an independent foreign exchange policy began to take shape.

The next wave of far-reaching changes, which started in the 1860s and continued into the following decade, set in motion a process which culminated in Finland obtaining her own monetary system and also in the Bank of Finland becoming independent of the Government.

The rouble's instability following the suspension of its convertibility into silver during the Crimean War led to efforts, under the leadership of Fabian Langenskiöld, the head of the financial section of the Senate, and his successor, J.W. Snellman, to acquire for Finland a monetary unit of her own. These endeavours were also motivated by nationalist aspirations, but these were not much discussed. Once a new currency, the markka, had been introduced and made convertible into silver in 1865, the rate of exchange in relation to the Russian paper rouble started to fluctuate. From then on, the Bank of Finland was obliged to assume sole responsibility for the maintenance of the value of the nation's currency.

At the same time, the Bank of Finland, which had formerly been subordinate to the Senate, was made subject to the Estates. In 1875 the administration of the State's financial affairs was largely transferred from the Bank to the newly established State Treasury. The independent position thus acquired by the Bank of Finland in respect to the country's government is still rare among central banks. Apart from its legal significance, the Bank of Finland's special position in the state administration has also had an important bearing on how methods of monetary control have developed in Finland. The banks' borrowing from the central bank and the monetary policy measures relating to it evidently would not have become so characteristic of Finland's financial system had the money supply been based more on credit granted to the State by the central bank.

The Bank of Finland developed into a central bank proper in the course of the 1890s. As the number of commercial banks increased and

their business expanded, they began to regularly utilize the opportunity to rediscount bills at the Bank of Finland. Thus the Bank of Finland became for them both a source of liquidity and lender of last resort. Nevertheless, for a long period after this, the Bank of Finland still continued to compete with private banks in the credit market, in addition to its role as the central bank.

This was already the time of the gold standard, which, with the exception of an interruption of more than a decade caused by the First World War, lasted from 1877 until 1931. While on the gold standard, the Bank of Finland's monetary policy was formulated in accordance with the requirements of exchange rates fixed in terms of parities in gold and free international capital movements. The primary and practically only instrument of monetary policy was the discount rate, changes in which were more or less closely followed by the banks' lending and deposit rates. The room for manoeuvre in interest rate policy was, however, very limited, since the system did not allow large interest rate differentials vis-à-vis foreign countries without endangering the value of the markka in gold, i.e. its exchange rate. Indeed, during the period of the gold standard, international interest rate differentials were surprisingly small when viewed from the perspective of the present day. This was particularly so prior to the First World War, the fundamental reason being the confidence in the permanence of exchange rates that prevailed in the markets.

REGULATION OF FINANCIAL MARKETS

The time from the collapse of the gold standard in 1931 until the period of reconstruction following the Second World War was characterized by increased interference in the functioning of the market mechanism in financial markets. A regulatory framework was gradually built up comprising the following elements: an interbank agreement on deposit rates, exchange control, regulation of banks' lending rates, regulation of bond issues, preferential tax treatment of bank deposits and finally a

quota system for the banks' central bank borrowing at the discount rate and an associated penalty interest rate schedule.

A similar transition to direct regulation of financial markets took place in most other industrial countries in the 1930s and 1940s. An obvious reason for this development was the desire to safeguard the stability of financial markets in the exceptional circumstances of that time, first during the Great Depression and then during the war. Another factor, the influence of which should not be underestimated, is the revolution that had taken place in economic policy thinking. The Keynesian approach, which had made rapid advances, cast serious doubts on the functioning of the market mechanism and was inclined towards a passive policy of low interest rates.

In Finland, the depression did not undermine the financial system to the extent that it did in many other countries. The purpose of the regulatory measures was to safeguard the country's external liquidity at a time when it was desired to prevent a rise in interest rates. A higher level of interest rates was considered inappropriate both during the depression of the 1930s and the period of war and reconstruction of the 1940s.

The regulatory system proved very stable in Finland and its main features remained essentially unchanged until the end of the 1970s. Nor should one belittle the tasks that were carried out while this system was in existence: a difficult period of reconstruction was successfully completed and an investment programme and the restructuring of the economy were implemented on a scale that, even by international standards, was outstanding. It was this system, too, which financed the unprecedented rapid growth of the economy that continued until the early 1970s.

Regulation rendered decisions on the rate of interest a highly political issue, and thus the benchmark for interest rates during the time of the gold standard, the discount rate, became a device serving primarily income distribution

ends and increasingly detached from the reality of the marketplace. The actual tightness of the financial markets was manifested in fluctuations in the availability of credit and in the charges that the Bank of Finland levied on the banks' central bank debt. The prevailing situation was revealed in a concrete fashion in the interbank call money market that the Bank of Finland opened in the mid-1970s. Initially, the interest rate level in this market exceeded the base rate by a full 20 percentage points, despite the fact that the Bank of Finland had made large placements in the market.

THE ROLE OF MARKET FORCES STARTS TO GROW

The far-reaching changes now under way in the Finnish financial markets have their origins in the early 1980s. The Bank of Finland withdrew from the forward exchange markets and the controls on capital flows relating to the covering of banks' forward operations were removed. Banks' borrowing at unregulated rates of interest - so-called market money - grew quickly to become a significant phenomenon. This period also witnessed a revival in the market for unregulated-rate taxable bonds, partly owing to tax concessions and partly to financial innovation: economic agents began to exploit the fact that these bonds were outside the scope of both interest rate and capital controls.

Thus, in Finland, the development of financial markets towards a more market-oriented system did not commence with the activation of the former discount rate, which was now called the base rate, but rather with the emergence alongside the administratively controlled markets of new, unregulated markets in which the cost of funds was more or less closely dependent on the call money rate. A dual rate system came into being with all the tensions and arbitrage opportunities that such a configuration entails. The unequal treatment of different financial claims in interest rate regulation and taxation prompted round-tripping operations within the financial system, which

in recent years have swelled the balance sheets of companies and banking groups alike.

The disadvantages of the dual rate system are so patent that it can be regarded as merely a transitional stage. The aim must be to bring unregulated rates and the base rate closer together in a way that safeguards the position of the base rate as the reference rate of the interest rate system even without administrative interference in interest rate formation. This objective is still rather distant. True, interest rate controls have been abolished in respect of new loans and thus the most important component of interest rate regulation has come to an end. Many elements of the old system of financial market regulation nevertheless remain intact. The interbank agreement on retail deposit rates and the supporting legislation on tax exemption are still in force, and the banks themselves have shown little enthusiasm for starting to compete through deposit rates.

Moreover, the liberalization of capital movements has not proceeded as far as the deregulation of interest rates. The most important steps taken so far in this sphere have been the liberalization of the forward markets and of long-term foreign credits raised by industrial firms; on the other hand, some measures have also been taken to tighten regulation. Notwithstanding this, it has been possible to observe that capital movements have become distinctly more volatile than previously.

A few years ago, it still seemed as though the capital flows induced by changes in interest rates were merely an annoying side-effect of monetary policy, which, it is true, could occasionally limit the leeway of the central bank, but which clearly had not become a major determinant of monetary policy. The present situation has unquestionably changed in this respect. We have, in an interesting way, approached a situation resembling that in which monetary policy was conducted during the gold standard: the exchange rate objective imposes rather strict limits on interest rate policy.

A reduction in the autonomy of monetary management is a logical consequence of banks' and companies' increased freedom to operate in foreign financial markets under the fixed exchange-rate regime adopted by Finland. Finland is no exception in this respect. Many other small countries have gained experience of the difficulties that arise with a loss in the independence of monetary policy. Economies have become more susceptible than previously to disturbances originating in foreign exchange markets. The ability of economic policy to influence especially the current account balance seems to have weakened. Adaptation to diminishing room for manoeuvre in monetary policy could prove especially difficult in Finland, where the central bank has traditionally borne a major responsibility for counter-cyclical policy.

FACING NEW DEMANDS

If it is desired to reduce the link between foreign exchange markets and the level of interest rates prevailing in domestic financial markets, and thereby seek to acquire a greater independence in monetary policy, then there are in principle two ways in which this can be done: either by making exchange controls distinctly tighter than they are at present or by allowing greater flexibility in exchange rates than at present.

Both ways involve obvious disadvantages. Admittedly, more stringent exchange controls might make it possible to prevent speculative capital flows, but at the same time the process of internationalization, which is vital for the continued growth of the Finnish economy, would be retarded.

Considered from this point of view, the alternative of allowing market forces greater influence in determining the value of the markka in foreign exchange markets would appear more attractive. This would, of course, have to take place within the fluctuation margins set for the currency index at any time. The drawback here is that greater exchange rate fluctu-

ation would also increase uncertainty precisely where it would clearly be detrimental, that is, in import and export trade. However, firms engaged in foreign trade can, to a large extent, hedge against short-term fluctuations of this kind by recourse to the forward markets. We are nevertheless still a long way off from this situation - nor will the transition to it be easy in a country as inflation-prone as Finland is.

Notwithstanding what has been stated above, it is clear that a certain reduction in the autonomy of monetary policy is the unavoidable price which must be paid for the advantages which participation in international economic integration brings to a small country, in particular. Developing the techniques of monetary control offers primarily an opportunity to create increased short-term leeway within the bounds set by the fixed exchange rate objective, not only for monetary policy but also for fiscal and income policies. These bounds do not constitute a barrier to the pursuit of coordinated counter-cyclical policy. But they do mean that a faster rate of inflation than abroad and continual current account deficits would necessitate more stringent monetary policy in order to combat the pressure on the exchange rate. Accordingly, the coordination of different segments of economic policy is today more important than ever in striving for stable and balanced economic growth.

Despite the structural change and deregulation of interest rates that have already taken place in the domestic financial markets, further significant changes can certainly be expected in the future. On the one hand, as international linkages increase, an essential requirement for the smooth and stable functioning of markets is that they are deeper than at present and that they offer a wider range of financial instruments, for instance, as regards available maturities. On the other hand, competition, which will obviously sharpen, and interest and tax arbitrage require that the taxation treatment of different financial claims and the regulations governing the activities of financial institutions should in the future constitute a

more coherent and harmonious whole than at present.

In the Regulations for the Bank of Finland, the principal function laid down for the Bank is to maintain a stable and secure monetary system. This function is particularly timely now that

rapid structural changes are taking place in international and domestic financial markets. Despite the fact that flexibility will be needed in seeking to develop the instruments of monetary policy and financial markets as a whole, the basic objectives of the Bank of Finland's activities will remain unchanged.

MONETARY AND FOREIGN EXCHANGE POLICY MEASURES FROM DECEMBER 1985 TO NOVEMBER 1986

1985

December

Call money market. The Bank of Finland lowers the call money rate from 12.0 to 11.7 per cent as from December 27.

Cash reserve requirement. The Bank of Finland lowers the cash reserve requirement from 5.6 per cent to 5.3 per cent of the total stock of deposits at the end of December.

1986

January

Interest rate policy. The Bank of Finland lowers its base rate from 9.0 to 8.5 per cent as from January 1, 1986. In the same context, the upper limit on the banks' lending rates is rescinded. The Bank of Finland requires, however, that the rates of interest applied to loans granted for the acquisition of a dwelling intended for own use are not raised in relation to the base rate.

As a result of this decision, the rates applied by the banks to existing loans and tax-free deposits are also generally presupposed to fall by 0.5 percentage point.

Regulation of average lending rates. The Bank of Finland revises its regulation of banks' average lending rates. With effect from the beginning of 1986, the average interest rate at the end of each calendar month may at most be the Bank of Finland's base rate plus 1.75 percentage points. If the average interest rate on a bank's total markka-denominated deposits exceeds the Bank of Finland's base rate by more than 1.25 percentage points, a bank's average lending rate may at most equal the average deposit rate for the month in question plus 0.5 percentage point.

Call money market. From the beginning of 1986, the Bank of Finland revises the system applied in the call money market, so that it pays a lower rate of interest on deposits than it charges on call money advances.

The rate on call money advances remains at 11.7 per cent while the rate on call money deposits is 11.0 per cent as from January 2.

Revision of foreign exchange regulations. In connection with the renewal of the Foreign Exchange Act, which enters into force at the beginning of the year, the Bank of Finland updates and partially liberalizes the foreign exchange regulations, the revised regulations also becoming effective on January 1, 1986.

Among other things, the penalty surcharge scheme applied to short-term import credits is abolished; the maximum period for suppliers' credit which does not require the special permission of the Bank of Finland is now six months. Investments in securities quoted abroad and in the form of funds held in accounts with foreign monetary institutions are permitted up to a maximum of FIM 10 000 a year per resident. The upper limit on foreign exchange which may be acquired for the purchase of a second home abroad is raised to FIM 600 000. Authorized banks are granted the right to surrender travel exchange without upper limit on the basis of a breakdown of costs drawn up by the purchaser of travel exchange. Securities brokers are accorded the same rights as the authorized banks to act as intermediaries in securities transactions between residents and non-residents.

Cash reserve requirement. The Bank of Finland lowers the cash reserve requirement from 5.3 per cent to 5.0 per cent of the total stock of deposits at the end of January.

Payments arrangement between Finland and Czechoslovakia. In keeping with an agreement

concluded between Finland and Czechoslovakia in August 1985, the practice whereby transactions are settled in convertible currencies is extended for three years from the beginning of 1986. Under the agreement, the payments arrangement is henceforth to be renewed automatically for three years at a time unless otherwise agreed upon subsequently.

Payments arrangement between Finland and Poland. In accordance with an agreement concluded in December 1985, payments between Finland and Poland in 1986 may be effected in Finnish markkaa as well as in US dollars.

Call money market. The Bank of Finland lowers the rate on call money advances from 11.7 to 11.4 per cent and the rate on call money deposits from 11.0 to 10.7 per cent as from January 24.

February

Cash reserve requirement. The Bank of Finland lowers the cash reserve requirement from 5.0 per cent to 4.7 per cent of the total stock of deposits at the end of February.

March

Interest rate policy. The Bank of Finland lowers its base rate from 8.5 to 8.0 per cent as from March 1, 1986. As a result of this decision, the rates applied by the banks to existing loans generally fall by 0.5 percentage point. The rates applied to tax-free deposits are lowered by the same amount.

Call money market. The Bank of Finland lowers the rate on call money advances from 11.4 to 11.2 per cent and the rate on call money deposits from 10.7 to 10.5 per cent as from March 3.

Investment reserves. On March 20, the Council of State decides to release, as from October 1, 1985, investment reserves made by companies

for accounting periods ending in 1984 for use elsewhere than in the Greater Helsinki area. The utilization period is to expire on December 31, 1987.

May

Interest rate policy. The Bank of Finland lowers its base rate from 8.0 to 7.0 per cent as from May 19, 1986. At the same time, the rates applied by the banks to existing loans fall by one percentage point, whereas the rates applied to 12 and 24 month deposits fall, at most, by 0.75 percentage point. The rates applied to other tax-free deposits fall, at most, by one percentage point.

Regulation of average lending rates. The Bank of Finland raises the upper limit on the banks' average lending rate in relation to the base rate by 0.25 percentage point with effect from May 19, 1986. The new upper limit is the Bank of Finland's base rate plus 2 percentage points or 9.0 per cent. If the average interest rate on a bank's total markka-denominated deposits exceeds the Bank of Finland's base rate by more than one percentage point, the bank's average lending rate may at most equal the average deposit rate for the month in question plus one percentage point.

Call money market. The Bank of Finland implements the following changes in its call money rates:

Effective as from	Rate on call money advances Per cent	Rate on call money deposits Per cent
May 13	13.0	12.5
May 14	16.0	15.3
May 16	14.0	13.3
May 20 (I)	13.0	12.3
May 20 (II)	12.0	11.3
May 22	11.0	10.3

Amendments to Foreign Exchange Regulations. The authorized banks are granted permission to use foreign credit to finance their customers' long-term export receivables as from May 13, 1986. Similarly, exporters are, on application, granted permission to raise foreign

finance in their own names in order to finance their long-term export receivables.

As from May 16, 1986, the Bank of Finland removes the upper limit on the amount of foreign financing credits for imports mediated by banks. At the same time, the Bank decides to start treating domestic foreign currency deposits received by banks as equivalent to banks' foreign borrowing; subsequent to this, banks are, in practice, no longer able to grant domestic credits denominated in foreign currency.

June

Call money market. The Bank of Finland lowers the rate on call money advances from 11.0 to 10.8 per cent and the rate on call money deposits from 10.3 to 10.1 per cent as from June 6.

Amendments to Foreign Exchange Regulations. The Bank of Finland revises the Foreign Exchange Regulations in some respects with effect from June 16, 1986. The main points of the amendments are as follows:

The prohibition concerning the sale of Finnish bonds and debentures to non-residents is rescinded on the condition that they are bought with earnings or sales proceeds from Finnish bonds and debentures acquired previously or with funds held in Finland by persons who have emigrated from Finland.

The authorized banks and other securities agents are permitted to sell foreign securities from their own portfolios to residents within the quantitative limits set in the Foreign Exchange Regulations.

In addition, the Foreign Exchange Regulations are relaxed mainly with respect to payments for goods and services, and certain quantitative limits included in the Foreign Exchange Regulations are raised.

FIM bond issue by the Nordic Investment Bank. The Nordic Investment Bank issues FIM

bonds in Finland totalling FIM 250 million, up to half of which the Bank of Finland permits to be sold directly to foreign investors. At least half of the issue is to be sold to domestic investors, but once quoted on the Helsinki Stock Exchange, the bonds can be sold and purchased abroad on the secondary market through the Stock Exchange.

August

Call money market. On July 31, the Parliamentary Bank Supervisors extend to the Board of Management of the Bank of Finland, until further notice, unlimited powers to raise the call money rate. In this context, the Bank of Finland decides to introduce, as from August 1, a call money rate policy under which call money rates are henceforth to be determined in accordance with the foreign exchange reserves. Thus, call money rates are to rise when foreign exchange reserves decline and fall when foreign exchange reserves grow.

The Bank of Finland implements the following changes in its call money rates:

Effective as from	Rate on call	Rate on call
	money advances	money deposits
	Per cent	Per cent
August 1 (I)	11.2	10.2
" 1 (II)	11.6	10.6
" 4	12.4	11.4
" 5 (I)	13.2	12.2
" 5 (II)	15.2	14.2
" 5 (III)	25.0	24.0
" 7	40.0	39.0
" 14	35.0	34.0
" 15 (I)	30.0	29.0
" 15 (II)	25.0	24.0
" 18	20.0	19.0
" 20	19.0	18.0
" 26	18.0	17.0
" 29	17.0	16.0

Regulation of average lending rates. The Bank of Finland abolishes the regulation of average lending rates as from August 1.

Revision of foreign exchange regulations. As from August 1, the Bank of Finland decides to exempt from regulation foreign credits with a

maturity of at least five years raised by manufacturing and shipping companies for financing their own operations. The decision on the removal of control does not apply to bond or debenture issues denominated in Finnish markkaa.

September

Call money market. The Bank of Finland implements the following changes in its call money rates:

Effective as from	Rate on call money advances	Rate on call money deposits
	Per cent	Per cent
September 2	16.0	15.0
September 5	15.0	14.0
September 9	14.0	13.0
September 12	13.5	12.5
September 18	13.0	12.0
September 26	12.5	11.5

Cash reserve requirement. As an exception to the cash reserve agreement concluded with the banks, the Bank of Finland decides to pay interest on cash reserve deposits for the period September—December 1986 at a rate which is 3 percentage points below the Bank of Finland call money lending rate, however, not less than 1/4 percentage point below the Bank of Finland base rate.

October

Call money market. The Bank of Finland implements the following changes in its call money rates:

Effective as from	Rate on call money advances	Rate on call money deposits
	Per cent	Per cent
October 2	12.0	11.0
October 16	11.8	10.8

Investment reserves. On October 23, 1986, the Council of State decides to release, as from April 1, 1986, investment reserves made for accounting periods ending in 1984 for use in the Greater Helsinki area. The utilization period is to expire on December 31, 1987.

In the same context, the Council of State decides to raise the special investment allowance from 3 to 6 per cent outside the Greater Helsinki area. The increased allowance can be applied to investment reserves to be used during accounting periods ending between November 1, 1986 and December 31, 1987.

Change in the cash reserve agreement. Samuel Montagu Osakepankki starts operations in Finland at the beginning of October, and on October 17, 1986 it joins the cash reserve agreement between the Bank of Finland and the banks.

November

Changes in the terms of central bank financing. As from the beginning of November, the Bank of Finland grants Samuel Montagu Osakepankki the same rights to central bank financing and to participation in the call money market as the other commercial banks. After Bank of Helsinki Ltd ceases operations as an independent bank and is merged with Union Bank of Finland Ltd at the beginning of November, the Bank of Finland cancels the rights of Bank of Helsinki Ltd to central bank financing and to participation in the call money market with effect from November 1, 1986.

ITEMS

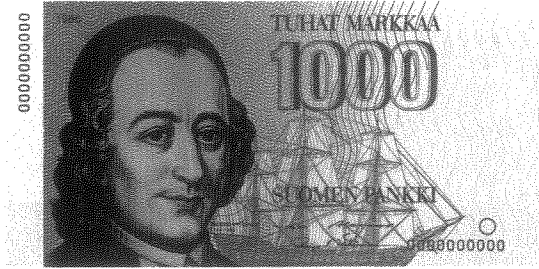
The Bank of Finland's new bank note series. The Bank of Finland is to put a new series of Finnish bank notes into circulation. The new series will be introduced gradually and will circulate alongside the old bank notes. The major reason for the change-over to an entirely new series of bank notes is the desire to improve the security and reliability of Finland's paper money.

The pictorial motifs chosen for the new bank note series emphasise the division of Finnish

history into three main periods: the period of Swedish rule, the period of autonomy and the period of independence.

The new series comprises all present denominations and a new denomination, a 1 000 markkaa note. The size of the new notes is exactly the same as that of the old ones.

The 1 000 markkaa note and the new 100 and 50 markkaa notes are being issued in December 1986. The new 500 markkaa and 10 markkaa notes will be issued in 1987.



The front of the 1 000 markkaa note. Anders Chydenius (1729–1803) was a clergyman and an important economist.



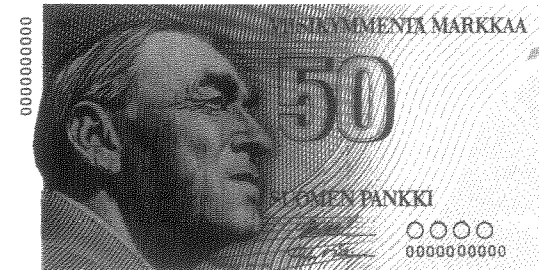
The back of the 1 000 markkaa note. The monument King's Gate is part of Suomenlinna or Viapori, the sea fortress located at the entrance to Helsinki.



The front of the 100 markkaa note. Jean Sibelius (1865–1957) ranks as one of the foremost orchestral composers in the history of music.



The back of the 100 markkaa note. A view of a forest lake with swans, which has associations with the national romantic spirit at the turn of the century and the music of Sibelius.



The front of the 50 markkaa note. Alvar Aalto (1898–1976) was one of the world's most outstanding architects of the functionalist period and the period succeeding it.



The back of the 50 markkaa note. Finlandia Hall, located in Helsinki on the shore of Töölönlahti, was designed by Alvar Aalto and is one of the best-known products of modern Finnish architecture.

Transfer of the share capital of the Mortgage Bank of Finland Ltd to Postipankki.

The Bank of Finland sold the share capital of the Mortgage Bank of Finland Ltd to Postipankki with effect from November 1, 1986.

There will be no change in the activities of the Mortgage Bank of Finland Ltd as a result of the change of ownership. Rather, the company will continue to grant long-term domestic and foreign credits to industry.

It has also been agreed that the Mortgage Bank of Finland Ltd will continue to finance investment in environmental protection until the beginning of the 1990s. In the meantime, an investigation is to be made into the possibilities of replacing the present financing scheme for investment in environmental protection by a new arrangement.

The Mortgage Bank of Finland Ltd was founded in 1956 for the purpose of raising long-term credits abroad on behalf of the Bank of Finland and using such funds to extend credits to Finnish industry against mortgage security.

Publication of the Bank of Finland. The following publication has appeared in series B:41: Kari Puumanen, *Three Essays on Money, Wealth and the Exchange Rate*, doctoral dissertation presented to the Helsinki School of Economics, Helsinki 1986, 143 pp. ISBN 951-686-119-9, ISSN 0357-4776.

The three essays of the dissertation report research on interrelated theoretical issues in open economy monetary dynamics. The subject matter of the first essay is the so-called "negative net foreign asset problem" encountered by several authors who have employed directly postulated portfolio balance models of the exchange rate. The puzzle is that models that at first sight appear quite plausible and well-behaving turn out to produce instability and perverse comparative statics when allowance is made for the occurrence of net debtor positions in foreign currencies. It has been argued that this problem can be solved

by assuming rational expectations and stabilizing speculation. In this essay it is demonstrated that the local saddle-point stability thereby achieved is not sufficient to remedy the shortcomings of the model. It is then argued that the negative net foreign asset problem is merely spurious and due to hidden inconsistencies in the model specification. A revised model is constructed that avoids these pitfalls without changing the basic idea of the portfolio balance approach. Stability in the revised model is dependent on the characteristics of the assumed consumption function, but does not depend on the sign of the net foreign currency position, nor on whether expectations are static or rational.

The second essay considers equilibrium exchange rate and price dynamics in a Sidrauski-type monetary growth model, where there is no steady state. Consumers maximize over an infinite horizon applying a constant rate of time discount, which is assumed to differ across countries. This provides the driving force for the wealth accumulation process, which tends to a boundary of the feasible states rather than to an interior steady state. Despite the lack of a steady state and thus of a proper saddle path, the model nevertheless provides for a state-dependent perfect foresight monetary equilibrium, which together with the real growth process determines the equilibrium path of the exchange rate and other monetary variables. In the case where utility separates in money and goods, the model features monetary superneutrality and the equilibrium is unique for non-negative money supply expansion rates. Moreover, since bonds denominated in different currencies are perfect substitutes under deterministic perfect foresight, the bond portfolios are arbitrary. Therefore, possible "real bond effects" due to unexpected changes in policy cannot be analyzed with this model.

The third essay examines monetary policy and exchange rate dynamics in a stochastic general equilibrium model with rational expectations and optimizing agents. Uncertainty derives from two ultimate sources, random variations

in output, on the one hand, and in money supply, on the other. The variables of the model are specified as Ito-processes and the model is solved using continuous time stochastic optimization techniques.

The main results are as follows. Structural properties such as the superneutrality of money or the lack of it is not affected by the mere substitution of stochastic for deterministic foresight. The randomness of the money supply reduces the nominal interest rate and therefore increases the demand for real balances and lowers the current level of output price. It also increases the variance of inflation, but does not affect the average inflation rate. The randomness of output increases both the mean and the variance of inflation. A negative correlation of money and output, whether due to automatic financing of fiscal drag by the central bank or to discretionary countercyclical monetary policy, increases both the mean and the variance of inflation. The model thus lends some support to views that advocate the independence of central banking from government financing.

While agents are free to borrow or lend internationally in either currency, it turns out that equilibrium holdings of bonds are zero in both countries. Therefore, contrary to earlier views in finance literature, international bond markets do not serve as a vehicle for pooling the purchasing power risks of national money supplies. The reason is that the component of purchasing power risk which is due to money supply randomness nets out against the risk in the present value of the monetary transfer from the government of each country to its own residents. This result highlights the importance of general equilibrium analysis in finding out the full consequences of a fiat monetary system for prices, wealth and risk.

BANK OF FINLAND

Board of Management

Rolf Kullberg
Chairman

Pentti Uusivirta

Ele Alenius

Harri Holkeri

Seppo Lindblom
*Absent as Minister
of Trade and Industry*

Esko Ollila
*Absent as Minister
of Finance*

Markku Puntila
Acting Member of the Board

Directors

Markku Puntila

Eino Helenius

Pentti Koivikko

Sirkka Hämäläinen

Matti Vanhala

Senior officials

H.T. Hämäläinen
*Secretary to the Board
of Management*

Timo Männistö
Internal Audit

Ossi Leppänen
Accounting

Urpo Levo
Administration

Reijo Mäkinen
Cash

Raimo Hyvärinen
Domestic Financing

Anton Mäkelä
Personnel

Heikki Koskenkylä
Research

Riitta Jokinen
Acting Head, Data Processing

Kari Puumanen
Economics

Antti Heinonen
Information

Ralf Pauli
Monetary Policy

Kari Holopainen
Bilateral Trade

Esa Ojanen
Exchange Control

Jonny Åkerholm
Exchange Policy

Kari Pekonen
Foreign Exchange

Markus Fogelholm
Foreign Financing

Bank of Finland Monthly Bulletin
Suomen Pankki — Finlands Bank
P.O. Box 160, SF-00101 HELSINKI, FINLAND
Telephone: National (90) 183 2629
 International + 358 0 183 2629
Telex: 121224 SPFB SF
Cables: SUOMENPANKKI Helsinki

EDITOR-IN-CHIEF Antero Arimo
EDITOR Marja Hirvensalo