

# BANK OF FINLAND

Monthly Bulletin

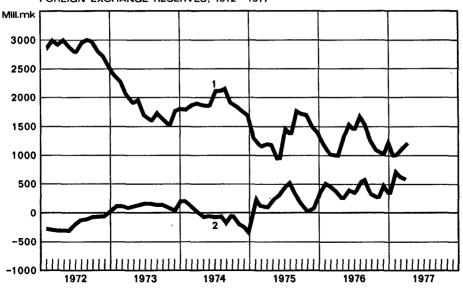
Bank automation

Finnish economy in 1976 and the current outlook

Finland's first nuclear power plant inaugurated

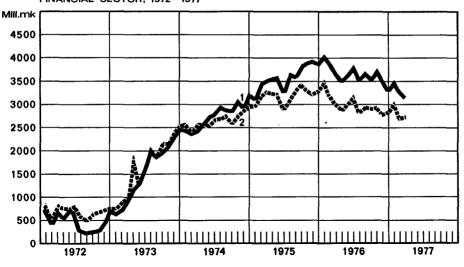
Board of Management of the Bank of Finland MAY 1977 Vol. 51 No. 5

# BANK OF FINLAND'S CONVERTIBLE AND NON-CONVERTIBLE FOREIGN EXCHANGE RESERVES. 1972 - 1977



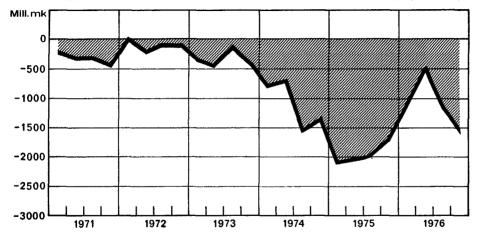
- 1. Gold and convertible currencies
- 2. Non-convertible currencies

BANK OF FINLAND'S POSITION WITH REGARD TO THE DOMESTIC FINANCIAL SECTOR, 1972 - 1977



- Net receivables from the domestic financial sector
- Discounted and rediscounted bills
   Seasonally adjusted end-of-month figures

BALANCE OF PAYMENTS CURRENT ACCOUNT SURPLUS / DEFICIT, 1971-1976



Seasonally adjusted quarterly figures

#### **BANK AUTOMATION**

Rapid progress in bank automation has been stimulated by the particular characteristics of the Finnish banking system. In contrast to the position in many other countries, there are only a few, large commercial banks alongside strong co-operative and savings banks movements and the Postipankki (post bank). These banks and banking groups have sizeable networks of branch offices all around the country; consequently the transmitting of payments to head office or to another bank and the updating of customer accounts by physical transportation of documents have both involved great problems. For some years now, customer accounts have been processed in bank computer centres in or near Helsinki.

Another special feature of the Finnish payments system has been the relatively small use of cheques — the passbook remains the major account document, and bank and postal giros are also important. It is only recently that the use of cheques has started to grow more rapidly. Through the automation of the payments system it is hoped that the more widespread use of cheques, and the accompanying increase in costs, can be avoided.

These factors have caused an almost simultaneous effort by all the banks to proceed towards on-line or real time computer systems, with vast terminal networks and a complex of minicomputer data concentrators in the different regions of the country. The aim of the current operation, started in 1976, is to switch rapidly away from physical transportation of the documents, towards data transmission through the telephone system.

For each bank or banking group this has meant a large investment in EDP centres for main computers as well as in terminals and data concentrators. The total cost of these investments can be estimated at 500—600 million marks. The number of bank branch terminals alone will be some six or seven thousand when

the real time and on-line systems are completed at the end of this decade. A large number of the terminals are produced domestically. which somewhat reduces the otherwise heavy reliance on imported EDP equipment. These investments have been expected to bring potentially high labour savings and to improve the service to bank customers. The saving in the number and the cost of bank staff was regarded as a particularly important factor in the boom period of early 1970's when the investment decisions were made. Now, with the economy's growth prospects and employment situation somewhat different, the labour shortage seems to be loosing some of its importance.

The rapid pace of bank automation is not, of course, a purely Finnish phenomenon. In order to improve their services and to cope with a growing number of documents, banks in general have gone over to computer-based terminal networks. What is extraordinary in Finland is the rapidity and simultaneity of the movement by the banks. At the beginning competition in introducing data processing system was to be seen; gradually, more and more co-operation has been emerging.

The most obvious example of co-operation is the automation of payments between banks. Three years ago, the major commercial banks. the Postipankki and the Bank of Finland started a joint project, POLM, to plan an on-line domestic bank transfer system. The need for additional equipment for this purpose would be very small, because it could be done by linking the banks' existing computer systems. The aim now is to start implementing this plan. The first phase has started early this year, with magnetic tapes containing payments details being transferred between the banks' computer centres. In this phase direct credits and cheques are included in the tape exchange system. Transportation of cheques between banks is avoided by truncating the cheques in the recipient bank branch. As in the old system, clearing between the banks takes place in the Bank of Finland. In the new system, the number of documents in the clearing will be much smaller because only the sums of the machine-coded transactions will have to be cleared.

It can be seen that, technically, progress towards on-line transfers is happening in stages, and the final outcome, a complete on-line domestic transfer system may come about at the turn of this decade. Several possible further developments have been under investigation, one of them being a general bank card. One of the preconditions for and benefits of an on-line payments system has been increasing standardization of procedures in different banks.

The present computer systems of the banks are heavily concentrated on Helsinki. The only exception is the Postipankki, which has regional data centres as well. Current technical development, especially of less expensive minicomputers, would favour a more decentralized payments system. In a country with a relatively large area like Finland, regionally decentralized systems would be a quite natural development.

In the international transfer of payments between banks, progress is going to be rapid. All the seven major Finnish banks are participating in SWIFT, the international computerbased payments transfer system, that is just now entering into operation. According to the schedule, Finnish and Swedish banks will start transmission of payments through the SWIFT network in the latter part of this year. To start with, the network covers the major banks in 13 Western European countries plus the USA and Canada, and it will be extended at least to Japan. Some discussion has been going on about extending the SWIFT network to the Eastern European countries as well.

The SWIFT network is separate from the domestic payments system. Each bank in Finland has its own minicomputer terminals especially for SWIFT traffic. These terminals are connected through a data concentrator by two telephone line routes to the main SWIFT computers in Brussels and Amsterdam. The main route from Helsinki goes via Copenhagen to Brussels, the other via Stockholm and Oslo to Leiden, near Amsterdam. In other respects, too, security and reliablity are given a high priority in the SWIFT system.

The main motivation for the creation of the SWIFT system, and the main benefit to Finnish banks in joining it is expected savings in cost. It is also expected that the system will enable the banks to meet the demand for better, and probably also faster service in international transfer of payments. It remains to be seen, however, how far these goals can be achieved by the new system.

April 21, 1977

BANK OF FINLAND	4.0	976		10	77	
-	Apr. 30	Dec. 31	Apr. 7	Apr. 15	Apr. 22	Apr. 29
	Apr. 30	Dec. 31	Арг. /	Apr. 10	Apr. 22	Api 29
Assets						
Gold and foreign exchange receivables	1 721	1 801	2 170	2 430	2 216	2 050
Göld Special drawing rights	121 272	121 236	127 221	127 221	127 221	127 221
Convertible currencies	1 000	1 004	1 185	1 300	1 106	976
Tied currencies	328	440	637	782	762	726
Other foreign receivables	1 449	1 660	1 718	1 715	1 726	1 733
Foreign bills Foreign bonds	281 342	436 397	441 450	441 447	451 448	455 451
Currency subscription to Finland's quota	042	007	400	771	770	701
in the IMF	826	827	827	827	827	827
Receivables from financial institutions	4 344	4 674	4 317	3 626	4 412	4 092
Cheque accounts of the commercial banks	193	174	160	153	182	152
Discounted bills	3 053	2 920	2 588	2 245	2 421	2 460
Bonds	413	332 1 204	350	354	395	375
Call money market advances Other financial institution receivables	671 14	1 204	1 192 27	861 13	1 372 42	1 050 55
Receivables from the public sector	341	447	433	435	434	407
Bonds	70	67	74	73	74	74
Total coinage Other public sector receivables	269 2	279 101	287	287	288	288
Receivables from corporations	1 126	1 400	72 1 342	75 1 348	72 1 357	45 1 398
New export bills	128	165	178	179	181	182
Financing of suppliers' credits	456	554	581	590	590	616
Bonds Other corporate receivables	208 334	198 483	190 393	189 390	188 398	188 412
Other assets	47	53	61	61	61	62
Total	9 028	10 035	10 041	9 615	10 206	9 742
				W.V.		1.1
Liabilities Foreign exchange liabilities	94	101	89	90	83	94
Convertible accounts	47	50	62	63	54	65
Tied accounts	47	51	27	27	29	29
Other foreign liabilities	1 413	1 923	1 923	1 923	1 923	1 923
IMF mark accounts Allocations of special drawing rights	1 155 258	1 665 258				
Notes and coins in circulation	2 676	2 885	2 903	2 850	2856	2 924
Notes	2 441	2 635	2 651	2 598	2 604	2 671
Coins	235	250	252 180	252	252	253
Deposit certificates in circulation				180	180	180
Claims of financial institutions	684	1 143	1 221	967	1 551	1 065
Cheque account of Postipankki Cheque accounts of the commercial banks	0 1	2 2	0 1	0 2	1 1	1 3
Call money market deposits	679	1 137	1 180	945	1 540	1 050
Other financial institution claims	4	2	40	20	9	11
Claims of the public sector	1 390	1 133	665	595	588	512
Cheque accounts Counter-cyclical reserves	1 55	2 59	0 34	0 34	2 34	0 34
Import deposits	1 296	973	498	429	419	345
Other public sector claims	38	99	133	132	133	133
Claims of corporations	523	308	307	273	272	272
Investment deposits	68	58	57 241	57	57	54
Capital import deposits Import levy deposits	441 8	. 242 . 6	241 · 7	200 11	200 11	201 13
Other corporate claims	6	. 2	2	5	4	4
Other liabilities	12	13	15	14	13	14
Equalization accounts	335	592	768	750	763	778
Capital accounts	1 901	1 937	1 970	1 973	1 977	1 980
Primary capital	1 400	1 400	1 400	1 400	1 400	1 400
Reserve fund	334	334	436	436	436	436
Undisposed profits Net earnings	97 70	203	102 32	102 35	102 39	102 42
Total	9 028	10 035	10 041	9 615	10 206	9 742
TVUT						- , 14

			Fore	ign-sec	tor			Pub	lic sec	tor	
End of year and month	Gold and convert- ible ex- change receiv- ables	Convert- ible ex- change liabilities	Gold and convert- ible ex- change reserve (1-2)	Non- convert- ible ex- change reserve	Other receiv- ables	Other liabilities	Net receiv- ables (3+4+ 5-6)	Receiv- ables	Liabili- ties	Net liabil- ities (9—8)	Deposit certifi- cates in circula- tion
	1	2	3	4	5	6	7	8	9	10	11
1970	1 812	11	1 801	<b>—</b> 63	639	606	1 771	119	121	2	203
1971	2 620	30	2 590	297	686	704	2 275	148	140	8	400
1972	2 613	43	2 570	<del></del> 6	757	788	2 533	175	49	126	790
1973	1 928	65	1 863	210	803	788	2 088	200	534	334	1 450
1974	1 784	62	1 722	<u>388</u>	1 123	788	1 669	302	560	<del>258</del>	1 040
1975	1 488	78	1 410	368	1 274	1 385	1 667	339	1 301	962	250
1976	1 361	50	1 311	389	1 660	1 923	1 437	447	1 133	686	
1976 March	1 184	157	1 027	378	1 442	1 413	1 434	338	1 465	1 127	_
March	1 184	157	1 027	378	1 442	1 413	1 434	338	1 465	1 127	
April	1 393	47	1 346	281	1 449	1 413	1 663	341	1 390	1 049	
May	1 627	46	1 581	434	1 465	1 922	1 558	352	1 360	1 008	
June	1 546	48	1 498	392	1 456	1 923	1 423	350	1 320	970	
July	1 800	62	1 738	507	1 483	1 923	1 805	361	1 227	866	
Aug.	1 670	123	1 547	620	1 503	1 923	1 747	388	1 263	875	
Sept.	1 414	142	1 272	355	1 533	1 923	1 237	415	1 188	773	·
Oct.	1 257	134	1 123	304	1 560	1 923	1 064	421	1 1 3 0	709	
Nov.	1 197	123	1 074	529	1 595	1 923	1 275	432	1 215	783	
Dec.	1 361	50	1 311	389	1 660	1 923	1 437	447	1 133	686	
1977											
Jan.	1 074	53	1 021	768	1 636	1 923	1 502	440	979	539	
Feb.	1 180	49	1 131	654	1 637	1 923	1 499	426	873	447	+
March	1 292	60	1 232	608	1 692	1 923	1 609	433	739	306	180
April	1 324	65	1 259	697	1 733	1 923	1 766	407	512	105	180

<sup>1</sup> The balance sheet of the Bank of Finland was revised in Dec. 1974. See explanations on page 18

## FOREIGN EXCHANGE SITUATION

Mill. mk

	Net holdings, Dec. 31, 1976			Net hol	dings, Marci	Change		
	Bank of Finland	Other	Total	Bank of Finland	Other	Total	March	JanMar.
Gold	121		121	127	_	127		+6
Special drawing rights	236		236	221		221	15	15
IMF gold tranche		_						
Convertible currencies	954	—1 783	829	884	2 568	<del>-1</del> 684	-424	<del>855</del>
Total	1 311	<u>1 783</u>	<del>47</del> 2	1 232	2 568	—1 336	-439	864
Non-convertible currencies	389	27	362	608	22	586	-43	+224

		Dο	mestic	financi	al sec	tor		Corp	orate s	ector	
End of year and month	Dis- counted and redis- counted bills	Cheque account receiv- ables <sup>2</sup>	Other receiv- ables	Cheque account liabilities to the commer- cial banks 3	Cheque account liabilities to Posti- pankki <sup>3</sup>	Other liabili- ties	Net receiv- ables (1+2+3 456)	Receiv- ables	Liabili- ties	Net receiv- ables (8—9)	Notes and coins in circu- lation
	1	2	3	4	5	6	7	8	9	10	11
1970	836	3_		11	4		834	383	324	59	1 455
1971	849			9	2	· <u> </u>	838	355	385	30	1 413
1972	753	5			2		756	321	73	248	1 879
1973	2 556	61			2		2 615	372	259	113	2 082
1974	3 034	114	266	4	4	1	3 405	631	195	436	2 462
1975	3 385	133	646	3	1	25	4 135	933	539	394	2 855
1976	2 920	174	1 580	2	2	1 139	3 531	1 400	308	1 092	2 885
1976											
March	3 035	202	1 421	1	1	843	3 813	1 098	427	671	2 544
April	3 053	193	1 098	1	0	683	3 660	1 126	523	603	2 676
May	3 235	176	1 004	2	0	551	3 862	1 175	488	687	2 775
June	3 358	196	1 111	1	0	_685	3 979	1 215	413	802	2 969
July	2 775	164	1 189	3	0	793	3 332	1 284	374	910	2 895
Aug.	2 749	169	926	3	0	531	3 310	1 297	301	996	2 858
Sept.	3 031	185	1 153	2	0	783	3 584	1 342	189	1 153	2 840
Oct.	3 148	164	1 566	3	0	1 005	3 870	1 356	297	1 059	2 882
Nov.	3 036	178	1 401	5	1	785	3 824	1 315	352	963	2 839
Dec.	2 920	174	1 580	2	2	1 139	3 531	1 400	308	1 092	2 885
1977											
Jan.	2 729	119	2 095	2	0	1 673	3 268	1 308	244	1 064	2 758
Feb.	2 604	176	2 405	1	1	1 865	3 318	1 306	353	953	2 790
March	2 769	123	1 690	2	0	1 322	3 258	1 321	307	1 014	2 845
April.	2 460	152	1 480	3	11	1 061	3 027	1 398	272	1 126	2 924

The balance sheet of the Bank of Finland was revised in Dec. 1974. See explanations on page 18.
 Including special index accounts
 Including cash reserve accounts.

#### SELLING RATES FOR FOREIGN EXCHANGE

Mk

April	21,	1977
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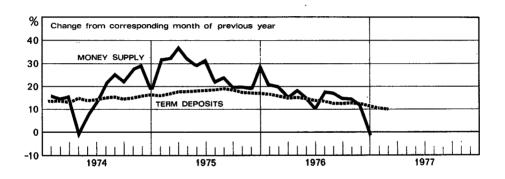
New York <sup>1</sup>	1 \$	4.052	Frankfurt o. M.	100 DM	171.20	Vienna	100 S	24.05
Montreal	1 \$	3.870	Amsterdam	100 FI	164.20	Lisbon	100 Esc	10.55
London	1 £	6.970	Brussels <sup>2</sup>	100 Fr		Madrid	100 Pta	5.93
Stockholm	100 Kr	93.30	Zurich	100 Fr	161.00	Tokyo	100 Y	1.465
Oslo	100 Kr	76.90	Paris	100 FF	81.80 <sup>-</sup>	Reykjavik	100 Kr	2.10
Copenhagen	100 Kr	67.90	Rome	100 Lit	0.459	Moscow 3	1 Rbl	5.431

As from Dec. 20, 1971 also applied to clearing accounts with Berlin, Budapest and Sofia.
 11,170 commercial rate: 11,130 financial rate.
 Clearing account: also Bucharest.

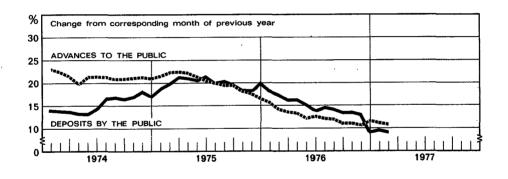
	Sigi	ht deposi		Term deposits							
End of year and month	Cheque	accounts	Postal	Commer-	Savings	Со-ор.	Posti-	Co-op.	All credit	Total (2 + 3 + 9)	
month	Commer- cial banks	All credit institutions	giro accounts	cial banks	banks	banks	pankki	stores	institutions		
	1	2	3	4	5	6	7	8	9	10	
1970	1 143	1 508	603	6 099	4 847	3 458	1 288	574	16 266_	18 377	
1971	1 343	1.734	754	6 962	5 446	3 877	1 491	642	1.8 418	20 906	
1972	1 851	2 371	979	8 096	6 232	4 500	1 806	720	21 353	24 703	
1973	2 144	2 892	1 360	8 989	7 109	5 237	2 1 5 9	805	24 299	28 <u>55</u> 1	
1974	2 551	3 478	1 638	10 213	8 288	6 308	2 641	921	28 371	33 487	
1975	3 447	4 642	2 301	11 764	9 751	7 538	3 170	1 094	33 317	40 260	
1976*	3 028	4 386	2 332	12 789	11 066	8 622	3 578	1 255	37 310	44 028	

1976*										
Feb.	2 855	4 188	2 258	11 929	10 033	7 779	3 263	1 132	34 136	40 582
March	3 007	4 336	2 032	11 837	10 032	7 751	3 224	1 139	33 983	40 351
April	3 040	4 120	2 155	11 894	10 080	7 819	3 270	1 148	34 211	40 486
May	2 843	4 021	2 048	11 972	10 174	7 8,70	3 292	1 161	34 469	40 538
June	3 004	4 222	1 865	11 963	10 279	7 971	3 332	1 167	34 712	40 799
July	2 985	4 176	1 951	11 966	10 389	8 064	3 390	1 184	34 993	41 120
Aug.	3 102	4 375	1 968	11 988	10 531	8 216	3 423	1 194	35 352	41 695
Sept.	2 856	4 094	1 935	11 896	10 545	8 286	3 426	1 213	35 366	41 395
Oct.	2 715	3 930	1 948	11 986	10 599	8 341	3 465	1 231	35 622	41 500
Nov.	2 933	4 170	1 913	12 031	10 769	8 477	3 480	1 248	36 005	42 088
Dec.	3 028	4 386	2 332	12 789	11 066	8 622	3 578	1 255	37 310	44 028

1977*										
Jan.	2 969	4 190	2 370	12 718	11 166	8 721	3 616	1 282	37 503	44 063
Feb.	2 827	4 103	2 495	12 719	11 273	8 821	3 673	1 296	37 782	44 380



		Adva	nces gran	ted by		Types of a	dvances		
End of year and month	Commer- cial banks	Savings banks	Co-op. banks	Posti- pankki	Mortgage banks	Loans & Bills	Cheque credits	Total (1 to 5) (6 and 7)	Money Supply
	1	2	3	4	5	6	7	8	9
1970	7 963	4 342	3 404	1 342	1 454	17 815	690	18 505	3 44!
1971	9 234	4 795	3 834	1 747	1 799	20 640	769	21 409	4 02
1972	10 667	5 503	4 483	2 245	2 374	24 473	799	25 272	4 959
1973	13 365	6 497	5 302	3 399	2 696	30 286	973	31 259	6 115
1974	15 869	7 716	6 456	4 617	3 264	36 782	1 140	37 922	7 283
1975	17 773	9 108	7 798	5 488	4 129	43 002	1 294	44 296	9 450
1976*	19 090	10 616	9 256	6 012	4 582	47 965	1 591	49 556	9 268
1976*	•								
Feb.	17 868	9 333	7 939	5 605	4 226	43 653	1 318	44 971	8 771
March	17 902	9 453	8 009	5 688	4 245	43 913	1 384	45 297	8 582
April	18 049	9 576	8 079	5 691	4 258	44 192	1 461	45 6 <b>53</b>	8 607
May	18 138	9 647	8 178	5 697	4 378	44 605	1 433	46 038	8 488
June	18 396	9 728	8 279	5 779	4 409	45 121	1 470	46 591	8 652
July	18 212	9 831	8 376	5 844	4 479	45 365	1 377	46 742	8 665
Aug.	18 309	9 965	8 505	5 885	4 507	45 652	1 519	47 171	8 830
Sept.	18 453	10 148	8 683	5 937	4 470	46 092	1 599	47 691	8 504
Oct.	18 658	10 279	8 855	5 939	4 475	46 617	1 589	48 206	8 422
Nov.	18 791	10 418	9.000	6 046	4 494	47 168	1 581	48 749	8 565
Dec.	19 090	10 616	9 256	6 012	4 582	47 965	1 591	49 556	9 268
1977*									
Jan.	19 176	10 683	9 271	6 044	4 625	48 168	1 631	49 799	• •
Feb.	19 204	10 762	9 276	6 071	4 619			49 932	



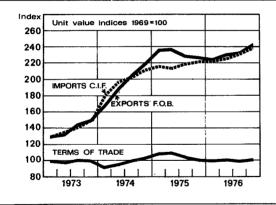
_	J	anDec.	
Revenue	1975	1976	
Income and property tax (net)	7 781	11 471	Wages,
Gross receipts	(20 414)	(25 223)	Repair
Refunds & local authorities	(-12633)	(-13 752)	Other c
Other taxes on income and			Total c
property	196	245	State a
Employers' child allowance			State a
payments	910	1 234	of wh
Sales tax	6127	6 667	Child a
Revenue from Alcohol Monopoly	1 482	1 726	Share i
Customs duties & import charge	636	621	healt
Counter-cyclical tax			Other t
Excise duty on tobacco	648	855	Total to
» » on liquid fuel	1 219	1 601	
Other excise duties	664	991	Machir
Tax on autom. and motor cycles	764	896	House
Stamp duties	501	633	Land a
Special diesel etc. vehicles tax	86	97	Total re
Other taxes and similar revenue 1	603	851	Interes
Total taxes	21 617	27 888	Index
Miscellaneous revenue	2 280	1 715	Net de
Interest, dividents etc.	534	576	Other
Sales and depreciation of property	11	7	Total c
Redemptions of loans granted	337	397	Increas
Total revenue	24 779	30 583	Lendin
			Other f
Foreign borrowing	534	803	Total e
Domestic borrowing	454		Redem
Total borrowing	988	1 587	Redem
Deficit (+) or surplus ()	(+1779)	(-882)	Total
Total	27 546	31 288	

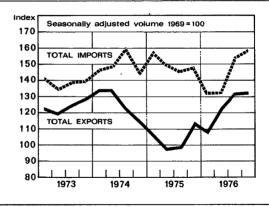
F	Ja	nDec.
Expenditure	1975	1976
Wages, salaries, pensions etc.	4 366	5 186
Repair and maintenance	643	722
Other consumption expenditure	2 088	2 403
Total consumption expenditure	7 097	8 311
State aid to local authorities	4 684	5 760
State aid to industries	4 436	4 614
of which: agric. price subsidies	(2 147)	(2 516)
Child allowances	707	819
Share in national pensions and		
health insurance	229	268
Other transfer expenditure	2 749	3 415
Total transfer expenditure	12 805	14 876
Machinery and equipment	1 073	1 202
House construction	639	640
Land and waterway construction	1 432	1 617
Total real investment	3 144	3 459
Interest on State debt	222	255
Index compensations	47	37
Net deficit of State enterprises	480	258
Other expenditure	47	45
Total other expenditure	796	595
Increase in inventories	+250	+37
Lending	2 369	2 965
Other financial investment	589	561
Total expenditure	27 050	30 804
Redemption of foreign loans	145	216
Redemption of domestic loans	351	268
Total redemptions	496	484
Total	27 546	31 288

<sup>&</sup>lt;sup>1</sup> Including supplementary turnover tax and import-equalization tax from June 1971.

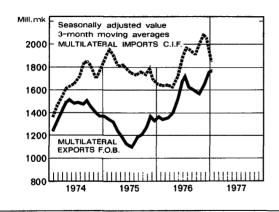
•	1973	1974	1975	1976				
State debt	Dec.	Dec.	Dec.	Oct.	Nov.	Dec.		
Foreign debt	1 395	1 152	1 603	2 144	2 152	2 248		
Loans	1 758	1 528	1 645	2 058	2 117	2 175		
Compensatory obligations	1	1	1	1	1	1		
Short-term credit	39	37	85	83	187	287		
Cash debt (net)	<del>468</del>	<b>571</b>	<b>—242</b>	<b>— 365</b>	609	-643		
Domestic debt	1 330	995	1 489	1 777	1 696	1 820		
Total State debt	2 725	2 147	3 092	3 921	3 848	4 068		
Total debt, mill \$	710	590	798	1 015	1 000	1 069		

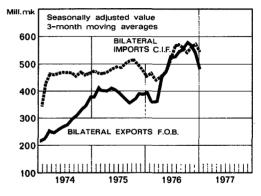
	\	alue mill m	n k		Indices of exports and imports 1969 = 100					
Period	Exports f. o. b.	Imports c. i. f.	Surplus of exports (+) or imports	Period	Vol	u m e	Unit v	alue	Terms of	
			(-)		Exports	Imports	Exports	Imports	Liaus	
1971	9 897	11 734	<b>—1</b> 837	1971	103	119	115	116	99	
1972	12 082	13 107	<b>—1 025</b>	1972	118	124	123	125	98	
1973	14 605	16 599	—1 994 <sup>°</sup>	1973	127	141	138	139	99	
1974	20 687	25 666	-4 979	1974	126	151	196	200	98	
1975	20 247	28 002	<b>—7 755</b>	1975	105	151	232	218	106	
1976*	24 505	28 560	-4 055	1976*	126	148	234	228	103	
1976*										
Jan.	1 564	2 131	<b>—</b> 567							
Feb.	1 478	1 949	471	1974						
March	1 967	2 249	282	JanMar.	131	146	169	184	92	
April	1 452	1 851	— 399	AprJune	131	147	190	199	95	
May	2 212	1 956	+ 256	July-Sept.	119	158	206	204	101	
June	2 232	2 441	<b>—</b> 209	OctDec.	125	152	221	213	104	
July	2 256	2 543	<b></b> 287							
Aug.	1 758	2 357	<b>—</b> 599							
Sept.	2 119	2 632	<b>—</b> 513	1975						
Oct.	2 394	2 361	+ 33	JanMar.	104	160	237	217	109	
Nov.	2 463	2 783	+ 320	AprJune	95	146	238	216	110	
Dec.	2 610	3 307	697	July-Sept.	94	143	230	220	105	
				OctDec.	124	153	228	223	102	
1977*										
Jan.	2 469	2 382	+ 87							
Feb.	1 917	1 978	<u>—61</u>	1976*						
,				JanMar.	106	134	226	224	101	
JanFeb.				AprJune	122	130	231	. 226	102	
1976*	3 042	4 080	<u>—1 038</u>	July-Sept.	125	152	234	233	100	
1977*	4.386	4 360	+26	OctDec.	147	165	244	240	102	





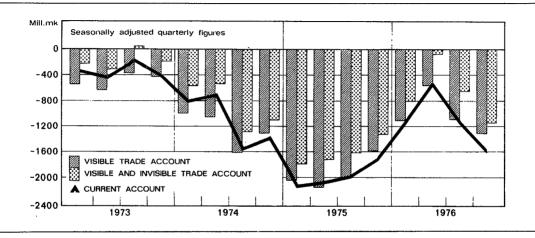
		E	kports, f.	o. b.		Imports, c.i.f.					
Period	Agri- cultural and other	Wood industry	Paper industry	Metal, en- gineering industry	Other goods	Raw materials and	Fuels and lubricants	Finished		Other goods	
	primary products	products	products	products		producer goods		Investment goods	goods		
1971	313	1 643	3 797	1 764	2 380	7 037	570	2 333	1 746	48	
1972	346	1 809	4 376	2 547	3 004	7 842	609	2 354	2 250	52	
1973	432	2 458	5 266	2 921	3 528	9 916	729	2 919	2 968	67	
1974	464	3 153	7 872	4 245	4 953	16 525	1 978	3 857	3 282	24	
1975	449	2 177	7 225	5 357	5 039	17 058	1 670	5 222	3 989	63	
1976*	804	2 892	7 860	6 891	6 058	17 828	1 581	4 972	4 102	77	
1976*											
Jan.	114	190	477	436	347	1 190	133	495	312	1	
Feb.	14	196	592	287	389	1 211	114	327	291	6	
March	125	214	780	338	510	1 339	91	461	353	5	
April	19	140	397	475	421	1 034	66	433	318	0	
May	78	158	601	837	538	1 236	106	291	316	7	
June	38	302	804	529	559	1 604	100	390	347	0	
July	29	.320	693	739	475	1 725	164	342	307	5	
Aug.	42	257	645	324	490	1 483	163	381	308	22	
Sept.	47	276	665	554	577	1 564	166	515	386	1	
Oct.	71	255	741	749	578	1 448	177	380	346	10	
Nov.	66	273	724	826	574	1 849	157	371	397	9	
Dec.	161	311	741	797	600	2 1 4 5	144	586	421	11	
1977*											
Jan.	204	286	655	748	576	1 378	144	546	308	6	
Feb.	45	232	625	476	539	1 286	102	268	320	2	
JanFeb.											
1976*	128	386	1 069	723	736	2 401	247	822	603	7	
1977*	249	518	1 280	1 224	1 115	2 664	246	814	628	8	





		Export	s, f. o. b.			Import	s, c.i,f.	
		January -	- February			January -	February	
Area and country	1	976*		1977*	1	976*		1977*
	%	Mill. mk	%	Mill. mk	%	Mill. mk	%	Mill, mk
OECD countries in Europe	66.5	2 022	68.8	3 018	66:6	2 717	67.5	2 944
Austria	0.7	20	0.7	29	1.8	75	1 5	67
Belgium-Luxembourg	1.7	53	1.4	60	2.0	81	1.9	85
Denmark	3.9	119	4.0	176	3.0	122	3.1	134
France	4.3	131	3.6	158	3.1	128	3.1	137
Federal Republic of Germany	9.0	275	10.6	464	15.0	612	17.3	753
Italy	1.5	47	1.5	65	2.0	83	2.1	91
Netherlands	3.3	99	4,3	189	3.2	129	3.4	149
Norway	4.5	137	6.3	278	4.4	180	2.3	99
Portugal	0.4	11	0.3	12	, 0.3	13	0.4	16
Spain	1.2	36	0.9	40	1.4	58	1.4	62
Sweden	16.8	510	19.1	840	18.2	743	18.5	807
Switzerland	2.0	60	2.0	87	3.2	129	3.7	162
United Kingdom	15.8	482	12.0	529	8.7	354	8.4	366
Other	1.4	42	2.1	91	0.3	10	0.4	16
					****	****		
OECD countries outside Europe	5.6	172	5.4	235	7.2	294	6.6	287
Canada	0.6	18	0.6	26	0.5	20	0.5	21
Japan	0.7	22	0.6	27	1.4	57	1.8	78
United States	3.7	113	3.4	148	5.3	216	4.3	187
Other	0.6	19	0.8	34	0.0	1	0.0	1
CMEA countries	18.9	575	18.6	815	20.5	838	21.3	928
Czechoslovakia	0.7	23	0.4	17	0.5	23	0.5	20
Democratic Republic of Germany	0.8	24	0.9	39	0.5	19	0,5	22
Poland	1.4	43	0.8	37	1.4	59	1.9	83
Soviet Union	15.3	465	15.6	683	16.8	685	17.6	767
Other	0.7	20	0.9	39	1.3	52	0.8	36
Ladia Assaulta	2.0	0.7	4 5	00	2.0	444	0.4	405
Latin America	0.3	87 8	1.5	69	2.8	114	2.4	105
Argentina		14	0.3	12	0.0	·········	0.0	0
Brazil Colombia	0.5	3	0.4	19 2	1.1	45 44	0.4	19
Other	2.0	.62	0.0	36	0.6	25	0.9	49 37
Otter	2.0	.02	0.0	30	0.0		Ų. <del>9</del>	
Other	6.1	186	5.7	249	2.9	117	2.2	96
GRAND TOTAL	100.0	3 042	100.0	4 386	100.0	4 080	100.0	4 360
of which								
EFTA countries	24.3	740	28.5	1 249	28.1	1 145	26.5	1 157
EEC countries	40.3	1 225	38.0	1 666	37.1	1 512	39.4	1 720
OECD countries	72.1	2 194	74.2	3 253	73.8	3 011	74.1	3 231

Period	Visible exports f.o.b.	Visible imports c.i.f.	Visible trade account	Transport. net	Travel. net	Other services, net	Visible and invisible trade account	Investment income, net	Transfer payments, net	Current account
1 <u>974</u> r	20 605	25 598	<u>-4 993</u>	+1 075	+326	+105	<u>—3 487</u>	<u>—1 006</u>	69	<u>4 562</u>
1975	20 181	27 939	<u>7 758</u>	+ 984	+105	+217	<u>6 452</u>	<u>—1 414</u>	<u>—108</u>	<u>7 974</u>
1976*	24 419	28 529	<u>-4110</u>	+1 186	+ 8	+348	<u>—2</u> 568	<u>_1741</u>	91	<u>-4 400</u>
1974										
JanMarch	,	5 683	<u>—1 094</u>	+338	+ 10		741	233	<u>—25</u>	<b>—</b> 999
AprJune	5 159	6 1 9 8	<u>—1 039</u>	+282	+ 74	+47	<u> </u>	239	<u>—11</u>	<u> </u>
July-Sept.	5 104	6 838	<u>—1 734</u>	+251	+243	<u>—36</u>	<u>—1 276</u>	243	4_	<u>—1 523</u>
OctDec.	5 753	6 8 <u>79</u>	<u>—1 126</u>	+204	1	+89_	<u> </u>	291	29	1 154
1975										
JanMarch	5 143	7 368	2 225	+292	<b>—</b> 43	— 44	<b>—</b> 2 020	<b>—316</b>	<b>—</b> 57	2 393
AprJune	4 695	6 688	<u>—1 993</u>	+221	+ 13	2	1 761	379	15	<b>—2 155</b>
July-Sept.	4 482	6 649	2 167	+237	+142	+ 57	—1 731	—308	— 6	2 045
Oct,-Dec.	5 861	7 234	<u>1 373</u>	+234	7	+206	— 940	411	30	<b>—1</b> 381
1976*										
JanMarch	4 989	6 357	<b>—1</b> 368	+276	53	+ 51	<b>—</b> 1 094	<b>—349</b>	<b>—24</b>	<b>—</b> 1 467
AprJune	5 833	6 241	<b>—</b> 408	+295	<u> </u>	+ 15	— 103	-484	-37	— 624
July-Sept.	6 113	7 481	<u>—1 368</u>	+ 322	+112	+115	819	<b>—436</b>	<u>—17</u>	-1 272
OctDec.	7 484	8 450	— 966	+293	- 46	+167	<u> </u>	<del>472</del>	—13	<u>—1 037</u>



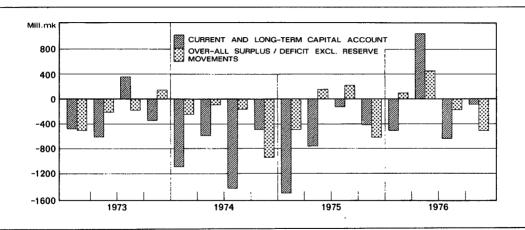
Drawings	Amortiza- Long- neo	Miscella- neous	Long-term	Current	Short- term import	Short- term export	Miscella- neous	Over-all surplus/	Reserve	movements	
of long-term loans	tions of long-term loans	term export credits, net	long-term capital items, net <sup>1</sup>	Long-term capital account	and long-term capital account	credits and prepay- ments, net	credits and prepay- ments, net	short-term capital items incl. errors and omissions	deficit excl. reserve move- ments	Bank of Finland	Other foreign exchange holders
	_	•••••									
+2 730	<u>—1 537</u>	223	<u> </u>	+ 947	<u>-3 615</u>	+930	+337	+ 873	<u>—1 475</u>	+739	+ 736
+6 729	1 445	214	+ 62	+5132	2 842	+638	+1 449	+ 8	<b>—</b> 747	444	+1191
+6130	<u>—</u> 1 785	<u>—191</u>	+ 56	+4 210	<u> </u>	+292	<u>—1 288</u>	+1 058	<b>—</b> 128	+ 78	+ 50
+481	<b>—</b> 522	<b>— 24</b>	26	— 91	<b>—1 090</b>	+288	+124	+409	269	+138	+131
+758	-362	114	+13	+295	<del></del> 591	+349	+ 58	+ 88	<b>—</b> 96	— 99	+195
+549	379	61	25	+ 84	1 439	+502	+312	+462	—163	+202	— 39
+942	<b>—274</b>	- 24	+15	+659	495	209	—157	— 86	—947	+498	+449

+1 206	—310 — 24	+11	+ 883	1 510	+310	+758	— 35	<u>     477                              </u>	+509
+1 870	433 48	+ 9	+1 398	<del></del> 757	<b>—14</b> 0	+758	+296	+157 —668	+511
+2 121	—287 — 3	+57	+1 888	—157	+131	34	+265	+205 + 91	296
+1 532	—415 —139	<u>—15</u>	+ 963	<u>418</u>	+337	— 33	<u></u> 518	<b>—632 +165</b>	+467

+1 404	<del>374 + 2</del>	<b>—</b> 79	+ 953	<del></del> 514	579	+119 +1072	+ 98 +373 —471
+2 096	<del>394115</del>	+83	+1 670	+1 046	<u>—</u> 158	+119 — 549	+458 —485 + 27
+1 239	568 20	<b>—</b> 25	+ 626	<b>—</b> 646	+ 520	<del></del> 764 + 717	—173  +263  — 90
+1 391	<del>4</del> 49 <del> 58</del>					—762 — 182	—511 — 73   +584

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

Including Direct investment, net.
 Including Allocations of special drawing rights 88 million in 1970, 85 million in 1971 and 85 million in 1972.



			w	holesa	le price	s 1949 =	100			Вu	ilding c	
		Orig	gin		Purpose		Stage	e of proce	ssing		1973 = 100	) ¹ 
Period	Total	Domes- tic goods	lm- ported goods	Pro- ducer goods	Machinery & transport equipm.	Con- sumer goods	Rew materials and com- modities	Simply pro- cessed goods	More elab- orately processed goods	Total	Wages in building trade	Building materials
1975	562	575	513	570	637	532	629	536	539	139	131	142
1976	626	646	548	614	707	621	679	594	614	152	142	154
1976												
June	611	629	539	599	698	605	669	576	599	150	146	150
July	628	648	554	610	706	633	686	596	615	151	146	153
Aug.	641	662	560	627	709	642	697	611	627	154	146	155
Sept.	648	670	565	640	721	640	700	623	633	157	146	160
Oct.	650	671	567	642	726	640	699	624	637	158	146	161
Nov.	656	678	570	646	727	651	706	627	645	159	146	163
Dec.	659	681	573	647	738	654	710	627	649	160	146	164
1977												
Jan.	669	692	584	653	770	665	710	629	672	165	149	169
Feb.	676	698	588	658	781	672	718	635	677	166	149	171
March.	682	706	591	660	777	687	727	645	680	167	149	172
¹ New se	eries.											
***************************************		Con-				Con	sumer	orices 1	972 = 100			-
Period	Cost of living Oct. 1951 = 100	sumer prices Oct.—Dec 1957 = 100	C. Total	Food	Bever- ages and tobacco	Clothing and foot- wear	Rent	Heating and lighting	Furniture, household equip, and operation	Traffic	Education and recreation	goods
1975	392	308	153	157	135	150	162	184	150	145	144	156
1976	449	352	174	182	164	166	171	200	164	174	162	185
1976												
June	442	347	172	176	161	164	171	201	161	172	161	182
July _	450	353	175	185	168	161	171	202	162	175	161	186
Aug.	456	358	177	191	168	163	171	202	165	176	161	187
Sept.	460	361	179	193	169	168	171	202	166	177	162	190
Oct.	465	365	181	192	168	173	174	208	167	178	167	194
Nov.	468	367	182	194	168	173	174	209	170	180	169	194
	469	368	182	195	168	173	174	209	170	181	171	195
Dec.												
Dec. 1977												
	476	374	185	196	174	173	174	210	174	185	179	198
1977	476 482	374 378	185 187	196 200	174 174	173 176	174 175	210 210	174 176	185 187	179 180	198 201

		By in	dustries		By in	stitutional s	ectors		······	
Period	w	age earners	in	Employ-	State	Munic-	Employ-	All salary	All wage	Ali employ-
-	Agri- culture	Industry	Con- struction	ees in services	employ- ees	ipal employ- ees	ees in private sector	earners	earners	668
1975	508	383	389	313	312	307	362	300	384	347
1976*	597	441	427	360	361	353	417	346	441	399
1975		·								
July-Sept.	514	390	395	319	322	311	374	308	396	358
OctDec.	559	399	405	335	334	332	380	318	404	366
1976*										
JanMarch	584	416	411	351	349	347	396	337	417	382
AprJune	591	448	427	362	364	355	422	348	448	404
July-Sept.	600	447	434	362	365	355	425	349	451	406
OctDec.	608	453	437	363	365	356	427	351	453	408
1977*						-				
JanMarch	626	456	441	370	376	364	431	356	459	414

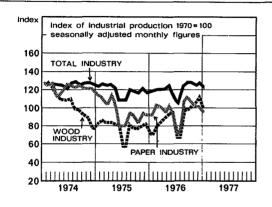
# PRODUCTION

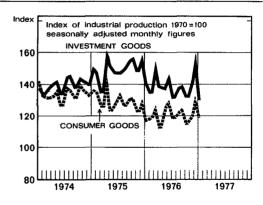
	Volume indices of production 1964 = 100													
Period	Gross domestic product	Indus- trial pro- duction	Agri- culture	For- estry	Construc- tion of buildings	Land and waterway construc- tion	Transport and com- munica- tions	Commerce, banking and insurance	Ownership of dwellings	Public admin. and defence	Services			
1974	160	197	90	96	168	103	163	179	158	159	165			
1975*	160	189	99	83	170	105	158	188	166	168	169			
1976*	162	194	107	79	148	103	160	188	173	174	173			
1975*														
July-Sept.	157	164	180	48	178	103	155	184	166	168	170			
OctDec.	162	200	81	64	180	103	158	198	170	170	171			
1976*														
JanMarch	155	198	63	84	115	103	147	182	171	172	171			
AprJune	162	193	104	91	148	106	158	185	172	173	172			
July-Sept.	161	170	185	55	160	101	163	<b>185</b>	173	175	172			
OctDec.	170	216	75	86	167	103	171	201	177	177	176			
1977*														
JanMarch	160	202	61	108	117	101	156	180	179	176	174			

Index of industrial production 1970 = 100

Dested	•					Spec	ial indices	of manufac	cturing		Total,
Period	Total	goods	ent producer goods	Consumer goods	Food industry	Wood industry	Paper industry	Chemical industry	Non- metallic mineral industry	Metal industry	adjusted for seasonal varia- tions
1974	127	141	122	135	112	107	124	154	136	141	127_
1975*	121	151	111	132	112	81	99	136	123	145	120
1976*	124	144	121	123	118	94	102	120	114	142	123
1976*											
Jan.	126	157	121	124	108	70	96	129	102	150	119
Feb.	124	143	121	122	108_	82	109	132	104	140	119
March	138	169	135	132	103	104	115	134	115	164	120
April	123	155	119	119	103	107	84	133	99	150	123
May	133	152	130	132	128	115	115	130	120	150	126
June	118	150	110	127	132	103	74	91	120	147	121
July	68	57	68	74	114	37	71	74	61	56	100
Aug.	123	133	120	126	124	85	113	116	118	133	123
Sept.	135	151	133	135	129_	101	116	136	139	155	131
Oct.	136	151	135	132	126	102	121	119	133	153	128
Nov.	137	160	135	133	129	117	109	106	133	159	126
Dec.	132	152	130	130	112	104	97	143	120	154	129
1977*											
Jan.	129	144	129	120	104	97	98	150	124	146	125
Feb.	125	138	126	119	98	101	102	136	108	143	125

<sup>1</sup> Revised figures.





Period	Population of working age 1 000 persons	Total labour force. 1 000 persons	Employed 1 000 persons	Un- employed 1 000 persons	Unemploy- ment, % of total labour force	Commercial timber fellings 1 000 solid cu. m	Retailers' sales volume index 1972 = 100	Whole- salers' volume index 1972 = 100
1974	3 483	2 268	2 229	39	1.7	34 457	114	114
1975	3 513	2 272	2 221	51	2.2	29 133	118	119
1976*	3 530	2 244	2 1 5 8	86	3.8	27 305	110	120
1976 <b>*</b>								
March	3 527	2 187	2 102	85	3.9	3 269	104	124
April	3 529	2 195	2 105	90	4.1.	3 217	110	113
May	3 531	2 224	2 151	73	3.3	2 735	111	116
June	3 533	2 396	2 320	76	3.2	1 821	114	124
July <sup>1</sup>	3 532	2 416	2 317	99	4.1	1 047	114	106
Aug.	3 531	2 352	2 253	99	4.2	1 155	106	121
Sept.	3 533	2 215	2 144	71	3.2	1 839	109	133
Oct.	3 532	2 183	2 111	72	3.3	2 293	111	125
Nov.	3 534	2 183	2 099	84	3.8	2 787	102	125
Dec.	3 535	2 186	2 085	101	4.6	3126	143	147
1977*								
Jan.	3 524	2 181	2 053	128	5.9	2 455	84	91
Feb.	3 528	2 163	2 032	131	6.1			

<sup>1</sup> Revised figures since July 1976.

## CONSTRUCTION OF BUILDINGS

Period	Building permits granted					Buildings completed					Buildings-	
	Total	Residen- tial buildings	Farm buildings	Industrial and business buildings	Public buildings	Total	Residen- tial buildings	Farm buildings	Industrial and business buildings	Public buildings	works under con- struction	
	Million cubic metres											
1974	53.23	22.35	3.26	21.30	3.52	46.50	21.54	2.75	17.04	3.14	52.84	
1975	51.42	19.65	3.79	21.62	3.39	47.85	20.59	2.80	18.68	3.64	52.45	
1976*	46.90	19.95	3.93	15.81	3.83	40.95	17.60	3.12	15.32	2.58	52.48	
1975												
July-Sept.	12.21	4.84	0.79	4.72	1.13	11.97	4.70	0.92	4.17	1.27	56.38	
OctDec.	10.71	4.04	0.59	4.52	1.00	14.15	6.08	1.06	5.65	0.73	52.45	
1976*												
JanMarch	8.52	3.04	0.73	3.29	0.86	8.04	3.55	0.52	3.25	0.42	49.19	
AprJune	14.00	7.39	1.80	2.81	0.55	9.59	3.60	0.35	4.45	0.78	51.30	
July-Sept.	12.42	5.43	0.71	4.44	0.97	8,89	3,59	0.97	2.95	0.67	54.82	
OctDec.	11.96	4.09	0.69	5.12	1.45	12.85	6.16	1.15	3.94	0.80	52.48	

### **EXPLANATIONS RELATING TO THE STATISTICAL SECTION**

#### BANK OF FINLAND

The balance sheet of the Bank of Finland was revised on Dec. 31, 1974 in connection with the revision of accounting legislation. New series have been built according to the revision. When the figures are not fully comparable to the previous ones, the series is broken by a line.

Page 4. Foreign sector: Gold and convertible exchange receivables = Gold + Special drawing rights + IMF gold tranche + Convertible currencies.

Gold and convertible exchange reserve = Gold and convertible exchange receivables — Liabilities in convertible currencies.

Non-convertible exchange reserve = Receivables in tied currencies

— Liat.ilities in tied currencies.

Other receivables = Foreign bills + Foreign bonds + Currency subscription to Finland's quota in the IMF.

Other liabilities = IMF mark accounts + Allocations of special drawing rights.

Public sector: Receivables = Total coinage + Other public sector receivables + Ronds

Liabilities = Cheque accounts + Counter-cyclical reserves + Import deposits + Other public sector liabilities.

Deposit certificates are interest bearing, freely transferable, term liabilities of the Bank of Finland. Their maturities range from one week to one year.

Page 5. Domestic financial sector: Other receivables = Call money market advances + Bonds + Other financial institution receivables. Other liabilities = Call money market deposits + Other financial institution claims.

Corporate sector: Receivables = New export bills + Financing of suppliers' credits + Other corporate receivables + Bonds.

Liabilities = Investment deposits + Counter-cyclical withholdings + Capital import deposits + Import levy deposits + Other corporate claims.

# DEPOSITS BY THE PUBLIC — ADVANCES TO THE PUBLIC — MONEY SUPPLY

Figures for deposits and advances are supplied by the Central Statistical Office. From the beginning of 1974 the figures include deposits by and advances to other credit institutions.

Page 6. Cheque accounts in all credit institutions relates to commercial banks, savings banks and co-operative banks.

Page 7. Money supply = Finnish notes and coins in circulation — Finnish notes and coins held by the banks + Cheque accounts of the public + Postal giro accounts of the public.

From 1974 the money supply includes estimates of Finnish notes and coins held by the savings and co-operative hanks. Exact figures are not available.

#### STATE FINANCES

Page 8. Official figures computed by the Economic Department of the Ministry of Finance. First date of publication: Bulletin No. 8. 1968. 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. Debt: Foreign debt includes promissory notes given to international organizations. Index-tied bond loans are taken at nominal values. Cash debt (net) = net debt to the Bank of Finland plus short-term debt to Postipankki less cash holdings (net) of State departments and funds.

#### FOREIGN TRADE

Pages 9—11. Figures supplied by the Board of Customs. *Indices* (p. 9). 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. 11): imports by countries of purchase exports by countries of sale.

#### BALANCE OF PAYMENTS

Pages 12—13. Figures are calculated by the Bank of Finland. In addition to the Board of Customs figures, exports include grants in kind but exclude stevedoring expenses and imports include seamen's duty-free imports, non-monetary gold, grants in kind and adjusted allowance for smuogling.

#### PRICE INDICES

Page 14. All indices calculated by the Central Statistical Office.

#### WAGES - PRODUCTION

Pages 15-16. Figures supplied by the Central Statistical Office. Page 16. 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. Commodities according to use: Investment goods weight 7.0, other producer goods weight 67.0 and consumer goods weight 26.0. The weights fot the special manufacturing indices are food manufacturing (SIC 311-2) 9.8, manufacture of wood, and wood and cork products (SIC 311-2) 8.0, manufacture of paper and paper products (SIC 341) 15.2, manufacture of industrial chemicals (SIC 351-2) 5.2, manufacture of non-metallic mineral products except products of petroleum and coal (SIC 361-9) 3.6 and metal industry (SIC 37-38) 25.9.

LABOUR — TIMBER FELLINGS — INTERNAL TRADE — TRAFFIC — CONSTRUCTION OF BUILDINGS

Page 17. Labour figures supplied by the Central Statistical Office. Commercial timber fellings compiled by the Ministry of Labour. Retailers' and Wholesalers' volume indices supplied by the Central Statistical Office. Construction of buildings figures calculated by the Central Statistical Office.

#### SYMBOLS USED

- Preliminary
- r Revised
- O Less than haif the final digit shown
- Logically impossible
- .. Not available
- Nil
- S affected by strike

#### 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. Mr. Urho Kekkonen has been President for three 6-year periods. His last term of office was extended by four years and will end on March 1, 1978.

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 1975 is as follows: Social Democrats 54. People's Democrats 40. Centre Party 40. Conservatives 35. Swedish Party 10. Liberal Party 9. Christian League 9, Finnish Farmers Party 2 and Finnish People's Constitutional Party 1.

#### 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 and OFCD 1969

#### LAND

THE AREA is 337 000 square kilometres (Great Britain's area is 245 000 sq. km and Italy's area 301 000 sq. km). Of the total, inland waters form 9.4 %. Of the land area (1970) 2.7 mill. ha (9.6 %) are cultivated and 19.1 mill. ha (68.4 %) are covered by forests.

OWNERSHIP OF LAND (1970): The total land area was distributed among different classes of owners approximately as follows: private 60.7 %, State 29.4 %, joint stock companies etc. 8.0 %, municipalities and parishes 1.9 %.

#### POPULATION

NUMBER OF INHABITANTS (1975): 4.7 million. Sweden 8.2. Switzerland 6.4, Denmark 5.1 and Norway 4.0 million.

DENSITY OF POPULATION (1975:) In South Finland 46.1, in East and Central Finland 13.3, in North Finland 4.0 and in the whole country an average of 15.5 inhabitants to the square kilometre.

DISTRIBUTION BY AREA (1975): 41 % of the population inhabit the rural areas, 59 % towns and urban districts. The largest towns are: Helsinki (Helsingfors), the capital 496 872 inhabitants. Tampere (Tammerfors) 165 928, Turku (Åbo) 163 981.

EMPLOYMENT (1975): Agriculture and forestry 15 %, industry and construction 36 %, commerce 16 %, transport and communications 7 %, services 26 %.

LANGUAGE (1974): Finnish speaking 93.3 %, Swedish speaking 6.5 %, others 0.2 %.

EDUCATION (1976): Practically all persons over 15 years of age are literate. There are 6 universities (the oldest founded in 1640) and 12 colleges of university standard.

CHANGE OF POPULATION (1975): births 14.1 °/ $_{00}$ . deaths 9.4 °/ $_{00}$ , change + 3.8 °/ $_{00}$ , net emigration 0.9 °/ $_{00}$ . Deaths in France 10.4 °/ $_{00}$  and Great Britain 11.9 °/ $_{00}$ .

#### TRADE AND TRANSPORT

NATIONAL INCOME (1976, in million marks): Gross domestic product at factor cost by industrial origin: agriculture 6 407 (6 %), forestry and fishing 4 950 (5 %), manufacturing 31 509 (31 %),

construction 9 233 (9 %), transport and communication 10 849 (11 %), commerce, banking and insurance 13 585 (14 %), public administration 5 264 (5 %), ownership of dwellings 3 639 (4 %), services 15 581 (15 %), total 101 017. Index of real domestic product 162 (1964 = 100)

FOREST RESOURCES (1975): The growing stock comprised of 1513 million m³ (solid volume with bark), of which 44 % was pine and 38 % 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, 55 % of these being pine. The annual growth was 57.5 million m³ and the total removal, calculated on the basis of roundwood consumption, was 40.1 million m³

AGRICULTURE (1975): Cultivated land 2.5 million hectares. Number of holdings 248 700, of which 167 800 are of more than 5 ha. Measure of self-sufficiency in bread cereals 133 % in the crop year 1975/76.

INDUSTRY (1975): Gross value of industrial production 89 210 mill. marks, number of workers 410 181, salaried employees 132 074, motive power (1975) 6.7 mill. kW. Index of industrial production 127 for 1975 (1970 = 100).

#### STATE RAILWAYS (Jan. 1, 1977): Length 5 920 km.

MERCHANT FLEET (March 31, 1977): Passenger vessels 118 (173 985 gross reg. tons), tankers 56 (1 188 156 gross reg. tons), dry cargo vessels 207 (813 795 gross reg. tons), other vessels 61 (9 343 gross reg. tons), total 442 (2 185 279 gross reg. tons).

MOTOR VEHICLES (Dec. 31, 1976): Passenger cars 1 032 900, lorries and vans 132 700, buses 8 800, others 7 100, total 1 181 500. FINNISH AIRLINES (April 1, 1977): Finnair and Kar-Air have in use 4 DC-8, 1 DC-6-ST, 8 Super Caravelles, 9 DC-9s, 5 DC-9-51s, 2 DC-10-30 and 5 Convair Metropolitans. Companies have scheduled traffic outside of Finland to 32 airports and to 20 domestic airports.

#### 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 mark (Finnish markka). Since Oct. 12, 1967, the par value of the mark is 0.21159 grams of fine gold per mark (equivalent to 4.20 marks per one SDR). On Feb. 15, 1973 a central rate of 3.90 marks to one U.S. dollar was set, and since June 4, 1973 the mark has been allowed to float.

THE CENTRAL BANK. The Bank of Finland (estab. 1811) functions under the quarantee 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, 1976). There are two big and five small commercial banks with in all 856 offices, 280 savings banks 380 co-operative banks, six mortgage banks, Postipankki and five development credit institutions. The co-operative stores accept deposits from their members. The Social Insurance Institution and fifty-nine private insurance companies also grant credits.

RATES OF INTEREST (Jan. 1, 1975). The official discount rate of the Bank of Finland (the basic rate applied by the Bank of Finland for discounts and rediscounts of commercial banks) is 9 % %. The range of rates for other credits granted by the Bank of Finland is between 7 % and 10 % %. Other credit institutions; term deposits  $5^3/_4$ %; 6 month deposits 6 % %; 12 month deposits  $6^3/_4$ %; 24 month deposits  $7^3/_4$ %; 36 month deposits 9 % + savings premium; 36 month deposits 8 % % + tax concession and sight deposits 1 % %; highest lending rate 12 % %.

# FINNISH ECONOMY IN 1976 AND THE CURRENT OUTLOOK

by Hannele Kuosmanen M.Sc. (Econ.) and Olavi Bantala M.Pol.Sc.

Economics Department Bank of Finland

The improvement in the international economic situation in early 1976 led to increased foreign demand for Finnish products. In spite of the recovery in exports, however, GDP grew only slightly because of a sharp decline in domestic demand. Investment demand fell because of unutilized capacity and a deterioration in the profitability outlook. Domestic demand was further limited by economic policy, which was constrained by the necessity to improve the external balance and slow down the rate of inflation. The current account deficit was indeed reduced, to 4.4 million marks, little more than half of the 1975 deficit. There was also a reduction in the rate of inflation, although it remained high by historical standards. The slight increase in aggregate output had no mitigating effects on unemployment. The average rate of unemployment was four per cent, but it was rising sharply at the end of the year.

In the autumn of 1976 the pace of economic recovery slowed down again in the major industrial countries. This was partly due to the exhaustion of the growth impulse brought on by inventory restocking and increasing consumption demand, and partly to restrictive policies which paid primary attention to the curbing of inflation. Cyclical developments abroad normally affect the Finnish economy after a lag, but it seems that this time the employment effects of poorer export prospects have already taken place. As a consequence of the sluggishness of domestic demand, imports will grow considerably more slowly than exports, implying further improvement in the current account balance. The trade account actually showed a surplus in the first quarter of the current year, although exceptional factors were involved. On the other hand, the employment situation is expected to remain severe, although some improvement is likely towards the end of the year. Following the devaluations of the Swedish, Danish and Norwegian crowns, the Finnish mark was devalued by 5.7 per cent in April 1977; this is not, however, expected to have a significant impact on economic activity.

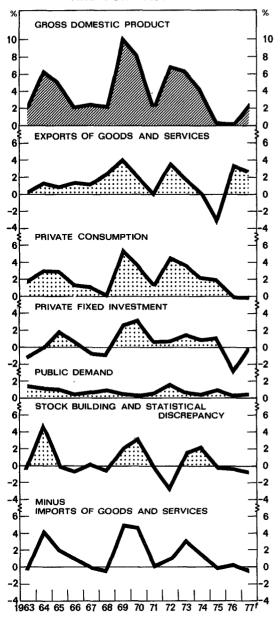
#### FOREIGN DEMAND

The end of destocking in Finland's major markets stimulated demand for wood-based products in 1976. The growth of metal industry exports, too, was boosted by the timing of substantial consignments of ships and heavy industrial equipment to both western and eastern markets.

Exports of wood industry products grew in volume terms by 25 per cent in 1976, although a new slackening in demand was discernible at the end of the year. The volume of paper industry exports was, on average, 15 per cent higher than in the previous year. Of the other sectors, agriculture, the chemical industry and the food-processing industry expanded their exports most rapidly. Export prices were rising moderately throughout 1976 but, mainly due to the carry-over effect from 1975 when the prices of wood-based products were falling sharply, the average price of exports in 1976 was only one per cent higher than the average price in the previous year.

In 1977, exports are expected to grow at a steady, albeit slow rate; international invest-

CHART 1. CONTRIBUTION TO THE GROWTH OF GROSS DOMESTIC PRODUCT 1963—1976 AND FORECAST 1977



Change in volume over previous year as a percentage of preceding year's gross domestic product.

in the development of Finnish exports, has not so far shown any great signs of recovery. The recent currency adjustment is unlikely to cause any significant changes in export volume.

#### DOMESTIC DEMAND

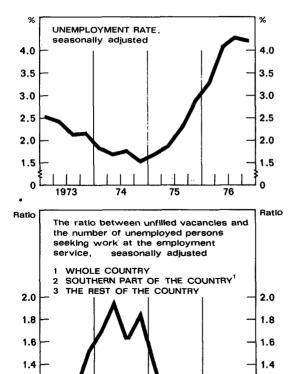
In spite of a steep decline in industrial investment its share in GDP still remained fairly high ment activity, which plays an important role last year. The decrease was particularly noticeable for the metal industry and the forest industries, and especially for paper manufacturing. Industrial investment was mainly concentrated on the completion of expansion projects and the replacement of old machinery; the volume of investment in new industrial buildings thus fell markedly. The rate of construction of dwellings had started to decline in 1975, and this continued in 1976. Nevertheless the number of dwellings completed was still above the level considered appropriate to satisfy demand in the medium-term.

According to the Bank of Finland's November 1976 investment inquiry, difficulties faced in investment during 1976 will continue to cloud the investment outlook for 1977. The volume of total private investment is thus not expected to recover in the immediate future. However, there may be some increase in machinery and equipment investment in the forest industry, unless poor profit performance reduces confidence still further. Industrial construction activity may start to revive towards the end of the year as a consequence of gradual improvement in demand.

The growth of the household sector's disposable income slowed down as a result of reduced employment, higher taxation and only a moderate increase in capital incomes. Real disposable income fell for the first time since 1957. Consumption reacted stiffly to this change in income: according to preliminary estimates the average propensity to consume rose by as much as 5 percentage points, and therefore the volume of private consumption decreased only slightly. The picture for household sector income development in 1977 is still rather unclear, since wage agreements have not yet been reached in many industries. However, if the recommendation of 4 to 5 per cent rises in negotiated wage rates is generally adopted, real disposable income will grow marginally as a result of increases in transfer payments and an inflation adjustment to tax scales effective from April 1, 1977.

<sup>1</sup> See Bulletin 2/1977, "The Bank of Finland investment inquiries".

#### **CHART 2. LABOUR MARKET**



<sup>1</sup> The Helsinki, Turku, Tampere and Kouvola administrative districts of the Ministry of Labour.

1.2

1.0

0.8

0.4

0.2

In order to improve the external balance and the state's financial position the Government restrained the growth of public sector demand during 1976. Public consumption expenditure increased by 3.5 per cent in real terms, with pensions and expenditure on education and health care still growing rapidly due to reforms started earlier. The growth of public investment came to a halt when several projects were postponed, and instead unemployment was alleviated primarily by government subsidies and advances. Since the Government is continuing with this austerity programme, the growth rate of public demand in 1977 is expected to remain below its long-term average.

#### OUTPUT AND EMPLOYMENT

Expanding exports reversed the downward trend of total output, but the recovery was curbed by the decrease in domestic demand. Though forest industry production grew markedly from the low level of the previous year. it did not reach pre-recession levels. The upturn in production was dampened by stocks of finished procucts, especially in the pulp and paper industry. The impact of the recession began to be noticeable in the metal industry almost a year later than in other sectors of the economy; in 1976 the volume of production fell slightly and order books shortened. The decline in domestic demand was reflected in the service sector as well as in consumption goods industries.

In the last quarter of 1976 seasonally adjusted total output was 5 per cent higher than in the first quarter. However, the annual growth rate of GDP at factor cost was only one per cent. During the first few months of the current year there were setbacks to production because of temporary lay-offs and strikes. Total output during 1977 is expected to be about 3 per cent above the 1976 level.

In spite of the slight increase in total output, the unemployment rate rose sharply in 1976. This was not only due to lags between production and employment changes but also to the fact that the revival in activity took place mainly in capital-intensive industries. Furthermore, reduced expectation of a rapid upswing weakened the employment situation towards the end of the year. The average rate of unemployment rose from 2.2 per cent in 1975 to 4 per cent in 1976.

The number of those in employment decreased considerably but, typical of the cyclical phase, the participation rate also went down. The employment situation deteriorated in all sectors of the economy, with construction and manufacturing being worst affected. As usual, there were wide regional variations. (Chart 2). Because of reduced domestic demand for labour, emigration to Sweden speeded up,

1.2

1.0

0.8

0.6

0.2

1973

particularly during the last few months of the year. The employment situation continued to deteriorate in the first quarter of 1977 when the seasonally-adjusted unemployment rate climbed to 5 per cent.

#### **IMPORTS**

During the first half of 1976 imports decreased substantially, and imports of finished goods in particular stayed at a low level until the end of the year. Following the revival of industrial output and because of expectations of price rises, imports of raw materials and energy started to increase in mid-1976. One of the fastest growing categories was imports of crude oil, partly as a result of new refining capacity coming on stream during the year. The volume of imports of investment goods went down more than did total domestic investment in machinery and equipment, and the volume of consumer goods imported was also lower than in 1975. Import prices went up by almost 5 per cent and hence the value of imports grew slightly.

Imports of raw materials have been low during the first few months of the current year, and an acceleration is expected later on. However, total imports will be kept at a fairly low level by the generally weak state of economic activity.

#### PRICES AND WAGES

In spite of the reduction which did take place in the rate of price increases, inflation remained one of the main problems in 1976. In the first half of the year, for five months of which a price freeze was in effect, inflation slowed down noticeably but, after the termination of the freeze at the end of July, prices started to go up again, in spite of continuing fairly strict regulation of prices. Measured by the GDP-deflator, the annual rate of inflation was reduced by 4 percentage points. Partly due to the lags in the process of shifting costs into prices, the consumer price index was still 14 per cent

above the level of the previous year. However, three percentage points of the rise was due to increases in indirect taxes and public charges.

According to the 1976 Collective Agreements<sup>1</sup>, wages and salaries were to be increased by 7 per cent from the beginning of February. The index of wages and salaries actually rose by an average of 15 per cent in 1976. As prices rose by nearly the same amount, there was only a small increase in real earnings. The development of other incomes was rather poor, especially that of company profits and forest owners' incomes. The share of the public sector in national income increased because of a higher net tax rate.

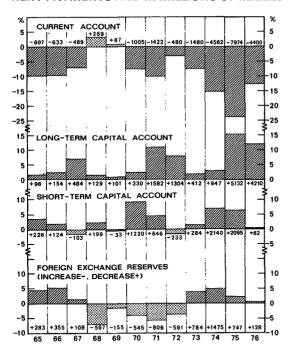
Inflationary pressures still prevailed at the beginning of the current year. The shift from direct to indirect taxes caused rises in consumer prices at the beginning of the year, with the sales tax, excise taxes and some state charges being increased in January. On the other hand, the income tax scales were adjusted downwards at the beginning of April.

In 1977 no general agreement on wages was reached by the central organisations in the labour market, but the State Incomes Policy Negotiator recommended certain guidelines to be followed in the sectoral negotiations. According to this recommendation, wages and salaries would be increased by 4 1/2 per cent during the year. By the end of March, the whole public sector and some unions from the private sector, altogether about 620 000 workers, agreed to settlements based on this proposal. In the remaining industries negotiations are still going on.

If the negotiations do lead to incomes agreements more or less in line with the recommended guidelines, increasing productivity will lead to a reduction in cost pressures. Furthermore, weak domestic demand is likely to place additional restraints upon inflation. On the other hand, the devaluation will induce some inflationary pressures.

<sup>&</sup>lt;sup>1</sup> See Bulletin 4/1976, "Collective Agreements for February 1976-January 1977".

# CHART 3. PRINCIPAL BALANCE OF PAYMENTS COMPONENTS AS A PERCENTAGE OF CURRENT PAYMENTS AND IN MILLIONS OF MARKS



# CURRENT ACCOUNT AND EXTERNAL LIQUIDITY<sup>1</sup>

As the volume of exports increased by 20 percentage points more than the volume of imports, the trade deficit was reduced to 4.1 million marks, having been 7.8 million marks a year earlier. Export prices, however, rose less than import prices, and consequently the terms of trade worsened, on a yearly basis. An increase in the surplus on the services account produced a larger decrease in the current account deficit. This stood at 4.4 million marks, some 4 per cent of GDP, and only a little over half of the preceding year's deficit.

The current account deficit was almost completely financed by the inflow of long-term capital. Import credits granted for purchases of ships and aircraft and for large investment projects amounted to a substantial proportion of this inflow. The net inflow of short-term capital was negligible, reflecting the development of commodity trade. Finland's net foreign

debt increased to 24 500 million marks, some 22 per cent of GDP. The overall balance deficit was only 128 million marks and thus the external liquidity position remained almost unchanged. The Bank of Finland's total foreign exchange reserves were reduced by 78 million marks while the reserves in convertible currencies fell by 99 million marks.

#### MONETARY DEVELOPMENTS

Financial disequilibrium in the economy was considerably reduced as a result of the recession and the pursuit of a tight financial policy. On the other hand, despite reduced fixed investment, corporate demand for credit remained high because of poor cash flow. As a result of the fall in the household sector's propensity to save, its erstwhile financial surplus turned into a deficit

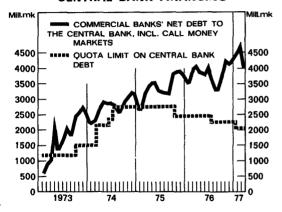
The financial position of the central government improved considerably, partly as a result of a fiscal policy aimed at curtailing public expenditure and partly because of fiscal drag. The central government also improved its financial position by increasing its issues of domestic bonds.

The central government's cash surplus was reflected as increased tightness in financial markets. Most of this surplus was channelled into the Bank of Finland's call-money market. The commercial banks' financing from the central bank grew by 517 million marks.

The stringency in financial markets was reflected mainly in the commercial banks, whose advances to the public grew only by 7 per cent. Savings banks and co-operative banks increased their lending to the public by 16 per cent and 18 per cent respectively, nearly as much as in the previous year. The growth rate of advances to the public granted by all the banks declined from 20 per cent in 1975 to 11 per cent in 1976. The public's bank deposits increased by 9 per cent in 1976, which was only about half as much as in the previous year. Demand deposits actually de-

See also Bulletin 4/1976, "The Balance of Payments and Foreign Exchange Policy in 1976".

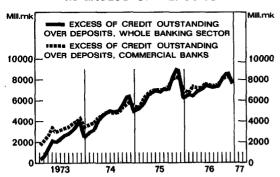
# CHART 4. COMMERCIAL BANKS'



clined, mainly because of reduced liquidity in the corporate sector, and the growth rate of time deposits slowed down considerably as household income development remained weak.

The growth rates of deposits differed considerably between various types of the bank. Deposits grew rather slowly for the commercial banks and for Postipankki, banks where demand deposits have traditionally made up a significant part of total deposits. Savings banks and co-operative banks, which have always relied more on time deposits, saw clearly greater deposit growth.

CHART 5. CREDIT OUTSTANDING IN EXCESS OF DEPOSITS



Bank advances to the public increased by 1 264 million marks more than deposits during 1976, and this brought the gap between the stock of deposits and advances outstanding to 7 688 million marks at the end of the year. The figure for the commercial banks on their own was nearly 7 987 million marks.

This year the growth rates of deposits and advances will probably be of about the same order of magnitude as they were last year. On the other hand the rates for the different types of banks may be somewhat more alike.

Credits granted to the public by both insurance companies and development credit institutions expanded by around 20 per cent. For the mortgage banks, however, both domestic and foreign borrowing facilities were limited, so that lending grew by only 11 per cent.

#### POLICY ISSUES

The economic strategy aimed at restoring current account balance and reducing the rate of inflation was continued during 1976. Accordingly, inflows of foreign capital and the growth of the Bank of Finland's net domestic assets were restrained in order to hold down the nominal growth of domestic demand. The emphasis has been on stringent monetary policies, but at the same time the Government has taken definite steps to restrain the growth of public sector expenditure. The Government implemented an austerity programme which reduced budgeted expenditure in 1976 by about 0.5 per cent of GDP. Savings were made both in consumption expenditure and in transfer payments, and the State's financial position improved remarkably.

In accordance with the February 1976 incomes policy agreement, the Government decided upon a five-month price freeze for both domestic and imported goods, although price rises stemming from the agricultural price agreement were permitted during the freeze. The price freeze was followed by a period of tight price control which terminated at the end of January 1977. After that, resort was made to the old Price Law of 1974, with minor modifications, for a transition period of ten months. These measures mean somewhat relaxed price controls during 1977. In the place of strict price regulation the Government is trying to reduce inflationary pressures via income tax reliefs and by giving its support to the proposals of the State Incomes Policy Negotiator.

Primary attention in employment policy has been paid to the creation of permanent new jobs in the private sector; even though the employment situation will remain severe this year, the number employed directly on public works will be therefore slightly lower than in 1976. The government has also taken special measures to alleviate youth unemployment by increasing the number of conscripts and expanding vocational training. In order to encourage construction activity the Government has increased depreciation rights on industrial buildings started between May 1, 1976 and September 30, 1977.

The temporary import deposit scheme introduced in 1975 was extended until the end of 1976, when the collection of deposits was terminated. All the deposits will have been released to the importing firms by the end of July. The Bank of Finland has announced that it will compensate for this relaxation by taking other steps to restrain domestic liquidity.

Domestic monetary policy remained tight throughout 1976, although the Bank of Finland did continue the selective credit arrangements for alleviating employment and production problems. The main tools of monetary policy were the regulations concerning the amount and the terms of commercial banks' central bank financing. At the beginning of July the Bank of Finland reduced the commercial banks' central bank credit quotas by 200 million marks to 2 300 million marks. This was done in order to neutralize the liquidity effects of increased export income and the partial return of import deposits. The quotas were cut by a further 200 million marks at the beginning of this year, and there will be another cut of the same amount at the beginning of May. In the credit instructions given in November 1976 the Bank of Finland emphasized that in the long term banks should keep their credit expansion equal to the increase of their deposits. Furthermore, priority in credit granting should be given to the financing of working capital and to the completion of investment projects already under way in profitable enterprises.

The concern of financial policy during 1976 was not simply to manage the overall balance of payments so as to maintain the foreign exchange reserves at an adequate level, but primarily to hold down the current account deficit so as to reach a more acceptable rate of foreign borrowing in the medium term. Thus tight domestic monetary management was combined with explicit rationing of long-term foreign capital inflows in line with the current financial budget. This meant that the actual inflow of long-term capital was below the amount which could have been obtained from the international capital market. On the other hand it seems clear that, in view of the heavy Finnish borrowing in recent years, good availability of foreign finance was conditioned by the Finnish authorities' determination to take definite steps to restrict further rapid accumulation of external debt.

The same technique of financial budgeting has been continued into 1977 in order to secure a further reduction in the current account deficit. The control of long-term borrowing was supplemented by a widening of the cash payments scheme for imports from the first of March in order to restrict short-term capital imports so as to make room for some additional long-term borrowing within the accepted overall financial budget.

A 5.7 per cent devaluation of the Finnish mark was effected on April 4, 1977 as a corollary to the devaluations of three other Nordic currencies. This was done in order to preserve Finland's competitive position as compared with Sweden, which is an important trade partner as well as a competitor in world markets. The main effect of the exchange rate adjustment will be to ease somewhat the tight financial position of export firms.

#### **ITFMS**

Finland's first nuclear power plant inaugurated. On March 23, 1977, Finland's first nuclear power plant, Loviisa I, was inaugurated by the President of the Republic, U. K. Kekkonen and the Chairman of the Council of Ministers of the USSR, A. N. Kosygin. Thus was brought to a successful conclusion seven years of work involving the participation of representatives of many nations.

Imatran Voima Osakeyhtiö's Loviisa power complex is one of the largest construction projects ever to have been undertaken in Finland. When completed, the complex, which is situated on the island of Hästholmen, 13 kilometres from the town of Loviisa, will consist of two power stations, and the total volume of the buildings will be almost 800 000 cubic metres. Construction work reached its peak at the end of 1975, when the total labour force engaged on the two stations amounted to almost 3 900 persons. Work is still proceeding on the second power station, Loviisa II, but even this has now reached the stage of the installation of machinery and equipment.

The main structures of the Loviisa I station are: the reactor building; the intake and discharge tunnels for cooling water; the waste storage, laboratory, and office buildings; the switching centre; the auxiliary building, which contains the power plant repair shops and the air and liquid purifying equipment; and the turbine hall, which is common to both stations. The supply, storage and maintenance building to serve both stations has also been built as part of the first stage.

Loviisa I has a net capacity of 420 MW. The reactor, the nucleonic design, the primary circuit piping, the steam generators, the two turbogenerators, the main equipment in the auxiliary building and the steel frame of the turbine hall have all been supplied and installed by the Soviet V/O Atomenergoexport and its subcontractors. The Soviet Union will also

supply the fuel for the reactor. The primary circuit pumps, refuelling machine, cranes and transformers are of Finnish manufacture. Finns have designed and constructed the gas-tight and pressure-proof protective shield for the reactor hall, and have also been responsible for civil engineering design and implementation for the whole project.

In collaboration with the Technical Research Centre of Finland, Imatran Voima Osakeyhtiö has been responsible for the quality control of the structures and the components. The ice condenser, which assures the safety of the power plant, has been constructed in Finland under an American licence, as have many of the other safety systems in the plant. The computer systems come from Finland, with the computers themselves from Britain. The instrumentation originates from the Federal Republic of Germany. There have also been deliveries from Canada and from France, and Swiss consultants were involved in the general planning of the complex.

The safety philosophy of the power follows western norms, and much attention and a great deal of resources have been devoted to the safety aspects. Very strict quality control has also been important in this context. The aim has been to create as safe and reliable a nuclear power plant as possible.

At 11.20am on January 21, 1977, the first reactor of the Loviisa power complex was made critical, and connection into the national grid was made at 10.46pm on February 8. The load on the machinery has been gradually increased within the limits laid down by the authorities. At the time of the inaugural festivities, the plant was operating at 75 per cent of its full capacity, generating 330MW of electricity.

The final cost of constructing Loviisa I, including some facilities to be shared by Loviisa II, will total some 1 000 million marks.

**Board of Management of the Bank of Finland.** On April 7, 1977, the President of the Republic appointed Mr. Ele Alenius, M.P., D.Pol.Sc., to the Board of Management of the Bank of Finland as from May 1, 1977.

#### **BANK OF FINLAND**

#### **Board of Management**

Mauno Koivisto

Ahti Karjalainen

Päiviö Hetemäki

Absent as a Member of Government

Pentti Uusivirta Rolf Kullbera

Ele Alenius

#### **Directors**

Jouko J. Voutilainen

Markku Puntila

Seppo Lindblom

Eino Helenius

Pentti Koivikko

Kari Nars

#### Senior officials

Pertti Kukkonen

Director, ADP-planning

Pekka Tukiainen

Domestic Financial Operations

Raine Panula

Antti Lehtinen
Capital Transfers

Kari Puumanen Economics Dept.

Heikki T. Hämäläinen

Administration and Legal Affairs

Eino Suomela Internal Audit

Pauli Kanerva
Personnel Administration and
General Affairs

Reino Airikkala Monetary Policy

Kari Pekonen Foreign Exchange Policy

> Raili Nuortila Eastern Trade

J. Ojala
Foreign Exchange Control

Heikki Koskenkylä

A. Nenonen
Foreign Correspondence

K. Eirola

Stig G Björklund
Banking Services

Antti Luukka *Cash* 

#### FOREIGN TRADE, 1972 - 1977

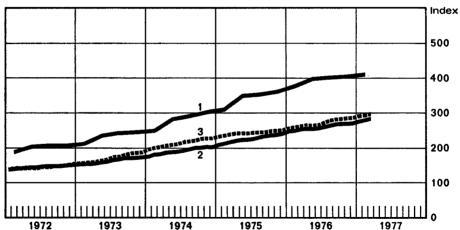
1. Exports f.o.b. 2. Imports c.i.f. Seasonally adjusted monthly fig-

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Mill.mk 3000 2500 2000 1500 1000 500

- 1. Index of salary and wage earnings 1964 = 100. quarterly
- 2. Cost of living index 1964 = 100.monthly
- 3. Wholesale price index 1964=100, monthly

PRICES AND WAGES, 1972 - 1977

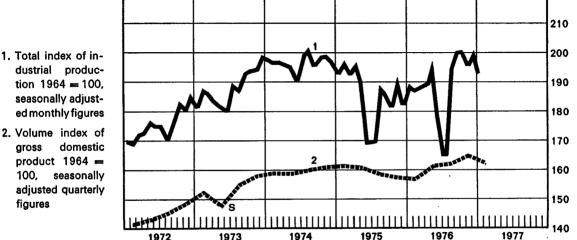


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