



BANK OF FINLAND

MONTHLY BULLETIN

Vol. 35 No. 8

AUGUST

1961

RECENT DEVELOPMENTS

FOREST WORKS AND EMPLOYMENT

There has been a continuous and lively foreign demand for wood and paper products, the principal Finnish export commodities. The recent expansions in the wood-processing industries have enabled Finnish exporters to satisfy the increased demand from abroad. In consequence of the rise in production, the augmented consumption of raw materials has further led to an appreciable increase in forest work. During the felling season June 1, 1960, to May 31, 1961, 47.8 million piled cu.m was cut for commercial purposes, or 8 per cent more than during the previous felling season. The increase principally related to spruce pulpwood (sulphite mills), birch pulpwood, and pitprops, whereas the fellings of pine pulpwood (sulphate mills) and large-sized timber for saw mills, showed even a small decline. In particular, the highly increased cut of birch pulpwood seems to indicate its applicability as a supplementary raw material for the cellulose industry. As regards soft logs, their fellings had already been on a high level during the previous season, and in the long run their allowable cut cannot much exceed its recent level (see Bulletin No. 6, 1961, p. 18 ff.). — With everything taken

into consideration, it can be stated that during the most recent felling season the total cut for commercial purposes attained its highest level since 1946.

	1960/61 Million piled cu.m	Change per cent
Softwood logs	14.3	— 3
Hardwood logs	2.1	+ 12
Spruce pulpwood	15.0	+ 19
Pine pulpwood	7.2	— 1
Birch pulpwood	1.7	+ 73
Pitprops	0.9	+ 23
Firewood	5.8	+ 14
Other timber	0.8	— 15
Total	47.8	+ 8

The increase in forest work has been one of the most important factors in the recent favourable development of the employment situation. A large part of the rural population is heavily dependent upon forest work in winter, when employment in agriculture is seasonally low. During the first five months of the current year, the employment in lumbering was some 8 per cent higher than the corresponding 1960 figure. On an average, about 8 000 more persons were occupied in the forests than in January—

On page 18, Seasonal Fluctuations in Industrial Production in Finland

May 1960. In the northern employment districts, it has even been reported that there was a considerable shortage of forest workers.

Because of the high level of general economic activity, the employment situation seems to be very good. According to the labour force sample survey, which covers all categories of workers, during the first four months of the current year the total employment (labour input) was on a 4 per cent higher level than in January—April 1960. According to the same survey, only about 1.4 per cent of the total labour force was unemployed in February—April. Practically speaking, the entire labour force is for the time being fully employed. In fact, there are grounds for belief that in some industries at least local overemployment makes its appearance during the summer season.

INVESTMENT ACTIVITY

Since the latter half of 1960, the growth rate of total demand has tended to adapt itself to that of total production. Despite this course of development in the total economic situation, it seems that a certain amount of imbalance has continued to exist between demand and production, and that this has been reflected in a large increase in imports.

Investment activity in particular has imposed a heavy pressure on the economic resources of the economy, fully employed since last summer. On earlier occasions, it has been forecast that the growth in investment will, at least to some extent, slow down during the current year. Statistical information at present available indicates that there has in fact been a moderate decline in the growth rate of total housebuilding activity, although it is true that residential building has continued to increase briskly. Other statistical indicators also provide similar evidence on the direction of investment in machinery and equipment. During January—April, according to the seasonally adjusted estimates, the production of investment goods remained on the level it had reached during the last quarter of 1960. So far, less certain statistical evidence of the changed pace in investment activity is afforded by the slowing down in the imports of investment goods in April. These amounted to 9 100 million marks, corresponding to 8 700 million marks one year ago. The moderate development in public investment has been a contributory factor to the evening out of total investment activity, and consequently, to a better total balance in the economy.

July 20, 1961.

BANK OF FINLAND

Mill. mk

	1960		1961			
	June 30	Dec. 31	June 22	June 30	July 8	July 15
BALANCE SHEET						
Assets						
<i>Ordinary note cover</i>	69 089	75 305	81 106	80 915	81 289	80 593
Gold	8 455	9 120	10 031	10 031	10 031	10 031
Foreign exchange	55 410	59 482	62 628	62 409	62 795	62 102
Foreign bills	445	870	779	807	795	792
Foreign bonds	4 779	5 833	7 668	7 668	7 668	7 668
<i>Supplementary note cover</i>	42 150	41 992	43 246	42 223	42 155	40 836
Inland bills discounted						
In foreign currency	11 032	10 496	10 060	10 060	10 060	10 060
In Finnish currency	7 000	7 232	10 940	11 386	11 432	11 465
Rediscounted bills	18 493	20 514	19 746	18 277	18 163	16 811
Treasury bond loan	5 625	3 750	2 500	2 500	2 500	2 500
<i>Other assets</i>	12 412	7 822	7 690	9 250	3 705	5 711
Finnish bonds	2 437	3 070	5 077	6 583	1 116	3 209
Cheque accounts	334	418	555	594	518	412
Finnish coin	797	719	803	825	833	843
Other claims	8 844	3 615	1 255	1 248	1 238	1 247
Total	123 651	125 119	132 042	132 388	127 149	127 140
Liabilities						
<i>Notes in circulation</i>	69 698	72 735	78 795	76 991	76 433	75 113
<i>Short-term liabilities</i>	17 159	16 676	15 856	17 814	13 043	14 035
Foreign exchange accounts	3 865	4 057	1 910	1 856	1 626	1 382
Mark accounts of holders abroad	3 798	4 241	4 025	3 957	4 044	4 110
Cheque account of the Treasury	8 129	6 187	8 599	9 738	5 711	6 892
Cheque accounts of banks	691	1 683	235	1 058	641	606
Other cheque accounts	416	167	268	378	211	190
Other short-term liabilities	260	341	819	827	810	855
<i>Long-term liabilities</i>	11 897	10 633	10 408	10 408	10 408	10 408
Foreign	10 553	10 030	9 607	9 607	9 607	9 607
Finnish	1 344	603	801	801	801	801
<i>Equalisation accounts</i>	9 117	9 085	10 088	10 238	10 293	10 568
<i>Bank's own funds</i>	15 780	15 990	16 895	16 937	16 972	17 016
Capital	10 000	10 000	10 000	10 000	10 000	10 000
Reserve fund	4 362	4 362	5 176	5 176	5 176	5 176
Profits undisposed	624	—	814	814	814	814
Earnings less expenses	794	1 628	905	947	982	1 026
Total	123 651	125 119	132 042	132 388	127 149	127 140
STATEMENT OF NOTE ISSUE						
Right of note issue						
<i>Ordinary cover</i>	69 089	75 305	81 106	80 915	81 289	80 593
<i>Supplementary cover</i> (Upper limit 50 000 mill. mk)	42 150	41 992	43 246	42 223	42 155	40 836
Total	111 239	117 297	124 352	123 138	123 444	121 429
Note issue						
<i>Notes in circulation</i>	69 698	72 735	78 795	76 991	76 433	75 113
<i>Short-term liabilities</i>	17 159	16 676	15 856	17 814	13 043	14 035
<i>Undrawn on cheque credits</i>	862	978	836	796	872	979
<i>Unused right of note issue</i>	23 520	26 908	28 865	27 537	33 096	31 302
Total	111 239	117 297	124 352	123 138	123 444	121 429

Rediscount rate since April 1, 1959, 6,75 per cent.

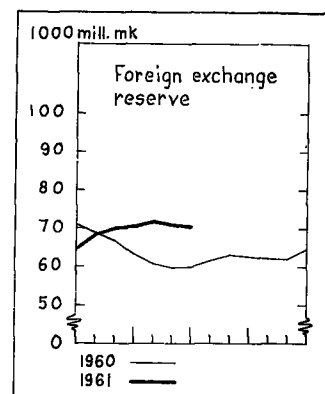
BANK OF FINLAND

Mill. mk

End of year and month	Gold and foreign accounts						Finnish credit institutions			
	Gold and foreign exchange	Liabilities on foreign exchange accounts	Foreign exchange reserve (1-2)	Other foreign assets	Other foreign liabilities	Net foreign assets (3+4-5)	Redis-counted bills	Liabilities		Net claims on the banks (7-8-9)
								Cheque accounts of banks	Account of the Mortgage Bank of Finland Oy	
	1	2	3	4	5	6	7	8	9	10
1952	22 099	13 141	8 958	7 024	5 524	10 458	17 217	2 088	—	15 129
1953	27 898	8 737	19 161	8 329	9 237	18 253	8 268	2 157	—	6 111
1954	36 573	7 017	29 556	8 206	10 102	27 660	8 465	2 187	—	6 278
1955	35 938	3 855	32 083	9 427	11 617	29 893	22 628	8 383 ¹⁾	—	14 245
1956	29 410	4 601	24 809	11 271	15 337	20 743	33 665	1 167	280	32 218
1957	38 429	4 569	33 860	17 642	20 185	31 317	24 912	2 405	— 42	22 549
1958	57 558	2 178	55 380	12 619	16 013	51 986	18 707	1 474	2 080	15 153
1959	73 065	2 116	70 949	9 249	15 840	64 358	4 718	3 856	252	610
1960	68 602	4 057	64 545	6 703	14 271	56 977	20 514	1 683	158	18 673
1960										
June	63 865	3 865	60 000	9 167	14 351	54 816	18 493	691	179	17 623
July	65 468	3 904	61 564	9 659	14 330	56 893	16 046	294	83	15 669
Aug.	66 894	3 993	62 901	9 187	14 106	57 982	16 028	332	169	15 527
Sept.	66 270	3 870	62 400	10 304	14 251	58 453	17 699	105	309	17 285
Oct.	65 938	3 789	62 149	9 459	14 180	57 428	18 660	— 26	267	18 419
Nov.	66 048	3 998	62 050	9 632	14 175	57 507	16 977	208	138	16 631
Dec.	68 602	4 057	64 545	6 703	14 271	56 977	20 514	1 683	158	18 673
1961										
Jan.	71 597	3 306	68 291	6 627	14 571	60 347	10 701	572	351	9 778
Feb.	72 452	2 688	69 764	7 516	14 124	63 156	11 636	— 55	510	11 181
March	72 443	2 115	70 328	8 417	14 108	64 637	14 317	313	745	13 259
April	74 016	2 446	71 570	8 401	13 968	66 003	18 441	642	865	16 934
May	72 972	2 305	70 667	8 736	13 804	65 599	17 099	702	813	15 584
June	72 440	1 856	70 584	8 475	13 564	65 495	18 277	1 528 ²⁾	741	16 008

¹⁾ Including cash reserve accounts 6 677. ²⁾ Including cash reserve accounts.

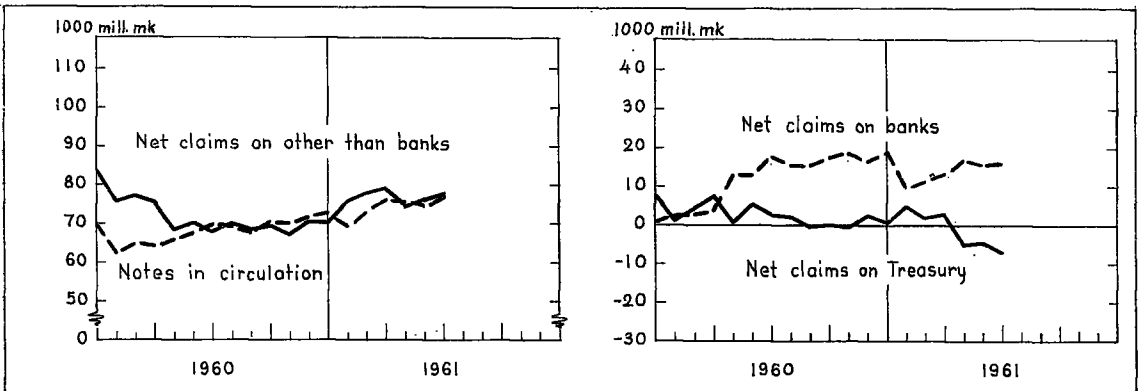
Category of currency	Foreign exchange reserve (col. 3 above) 1 000 mill. mk				
	1959	1960	1961		
	Dec. 31	Dec. 31	April 29	May 31	June 30
Gold	8.4	9.1	9.0	9.0	10.0
Convertible	49.7	44.2	46.1	45.3	43.0
Non-transferable EMA ..	4.7	3.2	3.9	3.9	3.5
Eastern Block	4.4	1.7	5.5	5.4	6.7
Other	3.7	6.3	7.1	7.1	7.4
Total	70.9	64.5	71.6	70.7	70.6



BANK OF FINLAND

Mill. mk

End of year and month	Treasury					Trade and industry				Notes in circulation
	Bills and bonds	Advances for stand-by stocks	Liabilities		Net claims on the Treasury 1+2-3-4	Inland bills in Finnish currency	Other advances	Liabilities	Net claims on the public (6+7-8)	
			Cheque account	Long-term						
	1	2	3	4	5	6	7	8	9	10
1952	14 738	—	—	—	14 738	14 678	5 672	2 185	18 165	46 153
1953	21 662	—	7 281	—	14 381	13 812	7 405	2 314	18 903	45 019
1954	21 662	—	15 470	—	6 192	11 940	6 895	791	18 044	47 902
1955	21 660	—	9 816	1 294	10 550	14 437	9 306	7 357	16 386	55 883
1956	19 160	—	10 550	2 310	6 300	14 922	10 547	5 205	20 264	60 735
1957	16 021	—	5 145	3 965	6 911	12 909	14 425	561	26 773	60 640
1958	9 033	4 335	7 146	9 502	-3 280	8 823	14 296	525	22 594	65 075
1959	10 326	6 786	6 418	3 029	7 665	3 888	10 500	392	13 996	69 435
1960	3 750	3 587	6 187	343	807	7 232	10 942	350	17 824	72 735
1960										
June	7 244	4 597	8 129	1 344	2 368	7 000	10 051	497	16 554	69 698
July	7 244	5 037	9 107	1 224	1 950	6 498	10 248	409	16 337	69 463
Aug.	7 244	5 158	11 851	1 120	-569	6 042	9 983	541	15 484	67 967
Sept.	5 994	5 269	10 254	1 019	-10	5 897	10 052	585	15 364	70 391
Oct.	5 994	5 365	11 414	536	-591	5 353	9 855	441	14 767	69 990
Nov.	5 994	5 526	8 632	359	2 529	6 027	10 090	610	15 507	71 531
Dec.	3 750	3 587	6 187	343	807	7 232	10 942	350	17 824	72 735
1961										
Jan.	3 750	3 593	2 239	331	4 773	7 012	10 843	1 056	16 799	69 588
Feb.	5 270	3 593	6 495	331	2 037	7 403	11 063	403	18 063	72 673
March	2 500	3 593	3 170	316	2 607	8 424	10 868	298	18 994	75 994
April	2 500	3 607	11 092	271	-5 256	8 660	11 168	307	19 521	75 252
May	2 500	607	7 423	271	-4 587	9 592	11 312	464	20 440	74 836
June	2 500	607	9 738	271	-6 902	11 386	11 295	464	22 217	76 991



DEPOSITS BY THE PUBLIC - FOREIGN EXCHANGE RATES

Mill. mk

End of year and month	Sight deposits			Term deposits						Total (2+3+9)
	Cheque accounts		Postal giro accounts	Commer- cial banks	Savings banks	Co-op. credit societies & their cen- tral bank	Post Office Savings Bank	Savings depart- ments of co-op. stores	All credit institutions	
	Commer- cial banks	All credit institutions								
	1	2	3	4	5	6	7	8	9	10
1950	24 460	28 248	10 537	36 579	39 366	20 175	13 892	5 356	115 373	154 158
1951	42 768	48 063	11 203	46 678	51 790	29 710	18 243	8 443	154 870	214 136
1952	28 020	33 410	10 765	59 742	65 344	37 223	23 562	10 798	196 706	240 881
1953	32 112	37 907	11 048	70 455	76 709	42 537	27 074	11 951	228 762	277 717
1954	34 913	42 108	13 451	83 444	92 174	52 050	30 079	13 415	271 195	326 754
1955	36 588	44 281	11 795	97 794	108 541	61 139	33 073	15 255	315 842	371 918
1956	38 614	45 963	15 265	96 807	112 402	63 531	34 162	16 013	322 953	384 181
1957	37 708	46 138	14 912	103 223	117 859	67 111	33 960	16 823	339 009	400 059
1958	39 568	49 575	18 277	122 256	131 260	74 272	38 167	19 191	385 175	453 027
1959	55 749	67 809	15 667	150 548	152 546	86 033	43 120	21 913	454 189	537 665
1960*	55 083	68 034	15 060	181 355	180 069	105 241	48 524	25 434	540 654	623 748
1960*										
June	54 253	65 426	13 784	163 976	161 612	93 361	44 773	23 205	486 956	566 166
July	53 943	65 041	12 673	165 457	162 867	93 882	45 098	23 324	490 655	568 369
Aug.	54 126	67 424	13 284	166 963	165 110	94 973	45 513	23 464	496 050	576 758
Sept.	57 022	70 090	14 342	167 902	166 663	96 568	45 628	23 951	500 741	585 173
Oct.	55 268	67 740	12 430	169 665	168 997	97 918	46 278	24 229	507 119	587 289
Nov.	58 138	70 967	13 179	172 009	172 051	100 128	46 685	24 580	515 483	599 629
Dec.	55 083	68 034	15 060	181 355	180 069	105 241	48 524	25 434	540 654	623 748
1961*										
Jan.	57 747	70 303	13 763	183 547	182 130	107 013	49 330	25 949	548 000	632 066
Feb.	55 937	67 937	16 150	187 051	185 155	109 651	50 430	26 392	558 708	642 795
March	55 107	67 648	15 264	188 948	188 411	112 293	51 107	26 726	567 515	650 427
April	50 428	63 898	13 259	190 960	190 130	113 823	51 395	26 802	573 141	650 298
May	53 232	66 641	14 377	193 505	191 939	114 856	51 519	26 750	578 600	659 618
June	54 622	67 048	12 721	194 172	191 401	114 125	51 594	26 514	577 828	657 597

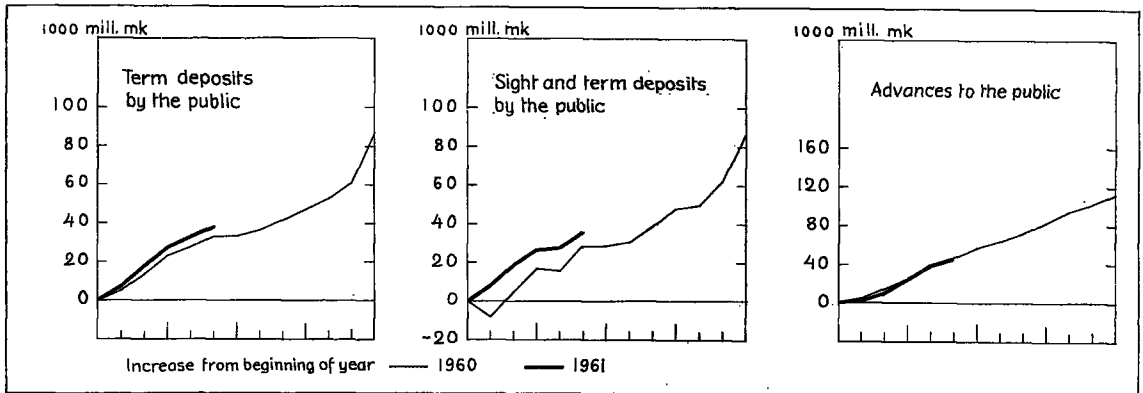
End of month	Index- ed de- pos- its	High- interest depos- its	Tax- conces- sion accounts
1960			
Oct.	16 054	32 825	7 248
Nov.	15 624	33 375	8 545
Dec.	15 128	35 557	14 366
1961			
Jan.	13 524	37 640	14 315
Feb.	11 903	39 526	14 305
March	10 388	41 037	14 290
April	9 380	42 230	14 287
May	8 609	44 049	14 285
June	7 931	45 018	14 276

Selling rates for foreign exchange			
June 30, 1961			
		mk	mk
New York ...	1 \$	322:—	Zurich 100 Fr 7 460:—
Montreal	1 \$	312:—	Paris 100 NF 6 575:—
London	1 £	897: 50	Rome 100 Lit 51: 88
Stockholm ...	100 Kr	6 240:—	Vienna 100 Sch 1 243:—
Oslo	100 Kr	4 491:—	Lisbon 100 Esc 1 122:—
Copenhagen ..	100 Kr	4 650:—	Reykjavik 100 Kr 845:—
Frankfurt o.M.	100DM	8 094:—	Madrid 100 Pta 542:—
Amsterdam ...	100 G	8 962:—	Prague, clear... 100 Kč 4 458:—
Brussels	100 Fr	646: 50	Moscow, clear. 1 Rbl 356: 67

ADVANCES TO THE PUBLIC - MONEY SUPPLY

Mill. mk

End of year and month	Granted by					Types of advances		Total (1 to 5) (6 and 7)	Money Supply
	Commer- cial banks	Savings banks	Post Office Savings Bank	Co-op. credit societies & their cen- tral bank	Mortgage banks	Loans & Bills	Cheque credits		
	1	2	3	4	5	6	7	8	9
1950	67 438	35 511	4 507	35 048	3 830	135 309	11 025	146 334	67 975
1951	85 578	45 554	8 508	41 849	4 425	172 003	13 911	185 914	98 877
1952	104 881	59 824	13 402	50 694	5 379	217 141	17 039	234 180	87 480
1953	105 659	70 511	18 782	56 765	9 847	245 275	16 289	261 564	92 122
1954	128 955	82 447	22 123	64 697	12 773	291 506	19 489	310 995	99 557
1955	155 436	96 454	24 866	72 868	13 599	339 797	23 426	363 223	104 298
1956	162 663	102 830	26 232	76 761	14 690	357 802	25 374	383 176	116 001
1957	160 379	106 639	26 047	78 064	15 717	363 000	23 846	386 846	117 065
1958	174 542	115 481	29 027	83 511	21 931	401 155	23 337	424 492	130 226
1959	209 686	132 725	33 138	96 730	32 578	477 264	27 593	504 857	144 835
1960*	260 460	154 780	39 495	117 441	45 216	585 964	31 428	617 392	149 616
1960*									
June	239 831	142 505	36 316	104 888	39 657	531 162	32 035	563 197	143 023
July	241 923	144 324	35 974	106 948	40 506	538 136	31 539	569 675	143 374
Aug.	243 093	146 999	37 447	108 866	41 315	546 517	31 203	577 720	143 820
Sept.	246 811	149 369	38 110	111 436	42 166	556 602	31 290	587 892	150 869
Oct.	251 340	151 323	39 610	114 280	43 178	567 483	32 248	599 731	144 189
Nov.	254 279	153 391	40 020	115 927	43 972	576 411	31 178	607 589	150 260
Dec.	260 460	154 780	39 495	117 441	45 216	585 964	31 428	617 392	149 616
1961*									
Jan.	258 393	156 357	40 168	118 358	46 425	588 802	30 899	619 701	148 390
Feb.	262 153	157 905	40 912	120 124	46 990	595 436	32 648	628 084	149 528
March	269 453	160 357	41 704	122 553	47 122	607 239	33 950	641 189	153 691
April	275 988	163 607	41 573	127 376	47 481	620 354	35 671	656 025	147 358
May	277 495	166 024	42 692	129 738	47 410	629 938	33 421	663 359	151 053
June	283 751	168 145	44 054	130 671	48 214	639 955	34 880	674 835	..

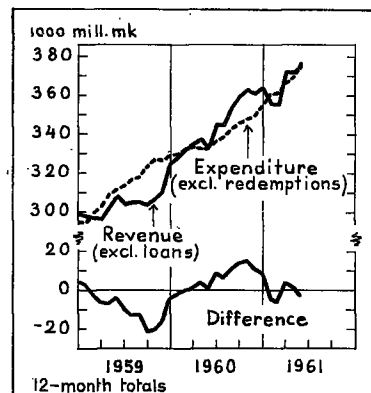


STATE FINANCES

1000 mill. mk

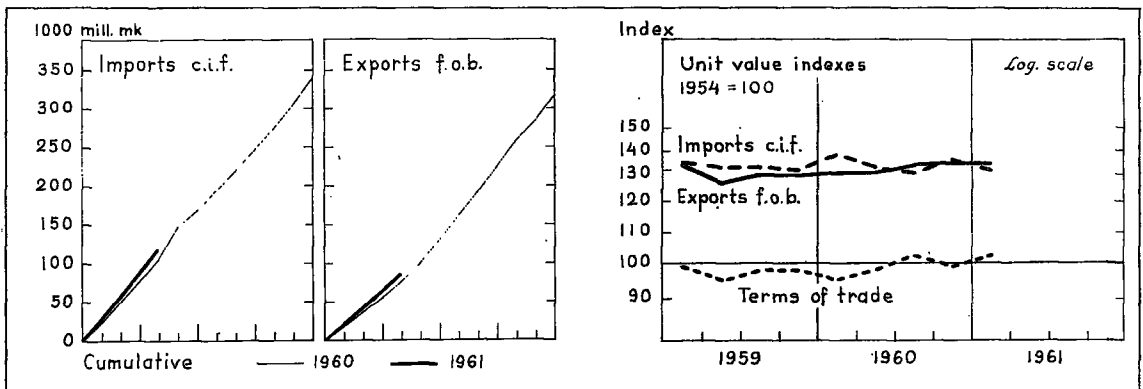
Revenue	Jan. — May		Expenditure	Jan. — May	
	1960	1961		1960	1961
Income and property tax (net)	29.4	30.2	Interest on State debt	2.3	2.4
Gross receipts	(70.3)	(88.6)	Child allowances	10.3	12.0
Refunds and communal income tax	(-40.9)	(-58.4)	The State's share in national pensions	3.4	6.1
Other direct taxes	0.5	0.3	Compensations to war-disabled	3.2	6.4
Purchase tax	32.9	36.3	Transfer of employers' payments for national pensions to the National Pensions Institution	1.3	2.2
Import duties	18.7	20.7	Subsidies	11.9	12.9
Revenue from Alcohol Monopoly	9.3	10.6	Net payments on price equalisation by extra-budgetary funds	1.4	0.5
Excise duty on tobacco	7.8	8.0	State aid to agriculture	1.4	1.7
Excise duty on liquid fuel	4.6	5.0	State aid to communal and private schools	10.5	12.8
Other excise duties	2.1	2.3	Net loss of State enterprises	—	0.7
Tax on automobiles and motor cycles	0.9	1.0	Maintenance of roads	2.8	3.7
Stamp duties	7.1	7.8	Other current expenditure	44.8	47.9
Employers' payments for child allowances and national pensions	11.3	12.5	Current expenditure	93.3	109.3
Net receipts of price equalisation by extra-budgetary funds	—	—	Real investments	30.7	32.1
Other revenue similar to taxes	2.5	2.8	Other capital expenditure	10.7	15.9
Total taxes	127.1	137.5	Capital expenditure	41.4	48.0
Interest and dividends	2.3	2.3	Total expenditure	134.7	157.3
Net profit of State enterprises	0.3	—	Redemption of external loans	1.5	1.1
Other current revenue	3.2	4.9	Redemption of internal loans	8.8	9.2
Current revenue	132.9	144.7	Redemption of indemnity bonds etc.	1.1	0.4
Capital revenue proper	3.3	3.3	Index premiums	0.6	0.6
Decrease in inventories	4.4	3.0	Redemptions	12.0	11.3
Capital revenue	7.7	6.3	Total	146.7	168.6
Total revenue	140.6	151.0			
External loans	—	1.5			
Internal loans	9.2	10.4			
Loans	9.2	11.9			
Short-term credit (increase +) ..	-3.1	-1.2			
Deficit (+) or surplus (-)	+0.0	+6.9			
Total	146.7	168.6			

Debt	1958	1959	1960	1961		
	Dec.	Dec.	Dec.	April	May	June*
External debt	79.0	76.6	74.4	74.6	75.4	76.2
Ordinary loans	61.5	72.2	74.4	78.2	75.6	75.9
Indemnity bonds etc. ..	7.3	6.5	4.4	4.0	4.0	3.9
Short-term credit	1.2	4.1	3.0	2.0	1.8	1.3
Cash debt (net)	-1.7	-5.8	-14.3	-16.1	-9.2	..
Internal debt	68.3	77.0	67.5	68.1	72.2	..
Total debt	147.3	153.6	141.9	142.7	147.6	..
Total debt, mill. \$	459.8	479.7	442.9	444.0	459.1	..



FOREIGN TRADE

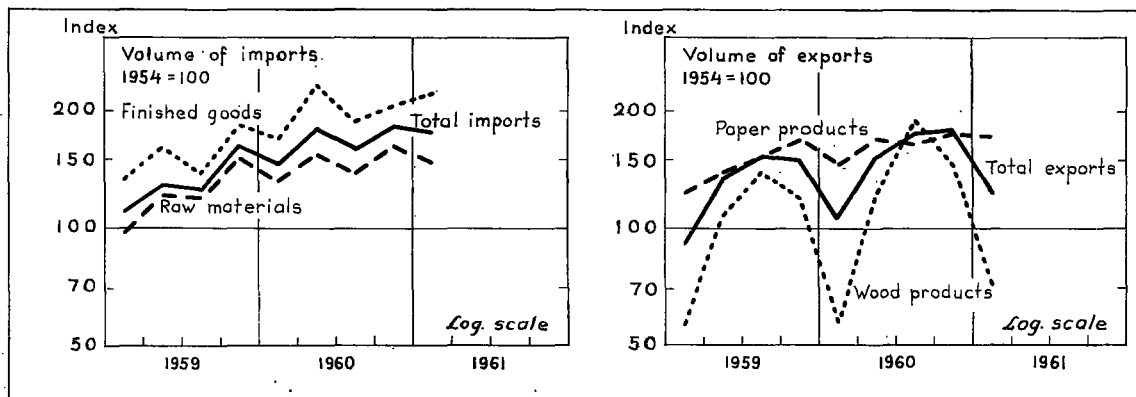
Period	Value, mill. mk			Unit value indexes 1954 = 100						
	Imports c. i. f.	Exports f. o. b.	Surplus of imports (-) or exports (+)	Articles of export f. o. b.					Articles of import c. i. f.	Terms of Trade
				Total	Round and hewn timber	Wood industry products	Paper industry products	Metal, en- gineering industry products		
1952	182 186	156 829	-25 357	130	165	99	147	118	121	107
1953	121 860	131 555	+ 9 695	98	111	95	91	109	106	92
1954	152 137	156 618	+ 4 481	100	100	100	100	100	100	100
1955	176 960	181 259	+ 4 299	106	110	105	105	115	100	106
1956	203 558	177 987	-25 571	106	110	104	109	106	105	101
1957	227 927	212 385	-15 542	116	118	113	119	120	122	95
1958	233 302	247 934	+14 632	138	139	133	139	153	140	99
1959	267 300	267 322	+ 22	130	120	121	131	152	133	98
1960*	339 747	316 523	-23 224	133	123	133	132	146	133	100
Jan.-April										
1959	78 862	67 845	-11 017							
1960*	104 926	76 525	-28 401							
1961*	117 987	85 363	-32 624							
1960*										
Oct.	29 182	35 589	+ 6 407	135	129	136	133	142	136	99
Nov.	30 976	26 539	- 4 437							
Dec.	33 769	31 384	- 2 385							
1961*										
Jan.	27 841	20 625	- 7 216	134	147	135	134	133	133	101
Feb.	27 461	20 874	- 6 587							
March	33 073	22 294	-10 779							
April	29 612	21 570	- 8 042							



FOREIGN TRADE BY MAIN GROUPS

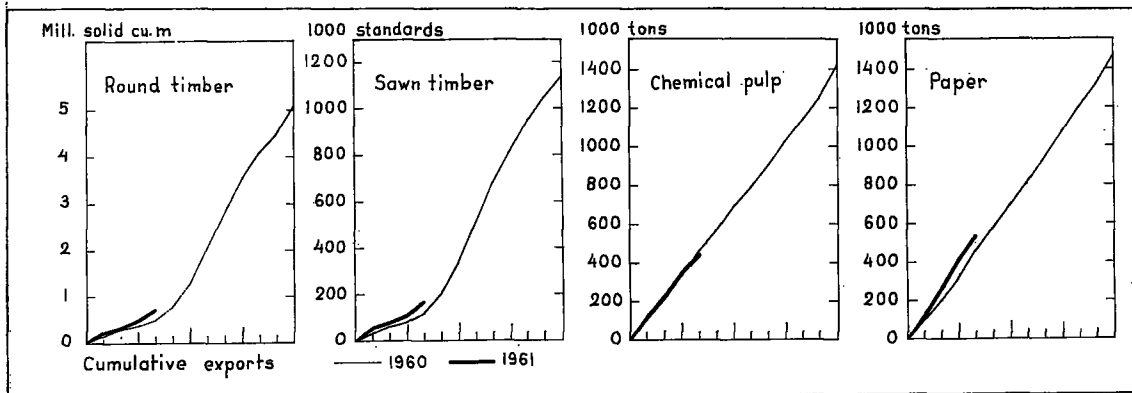
Mill. mk

Period	Imports, c. i. f.				Exports, f. o. b.					
	Raw materials and accessories	Fuels and lubricants	Finished goods		Agricultural products	Round and hewn timber	Wood industry products	Paper industry products	Metal, engineering industry products	Other goods
			Producer goods	Consumer goods						
1952	97 500	21 952	35 664	27 072	5 185	28 441	42 891	65 350	11 094	3 868
1953	65 148	15 879	24 029	16 804	4 719	10 251	43 671	47 926	20 936	4 052
1954	86 420	17 337	28 797	19 581	5 152	13 582	49 730	61 662	20 988	5 504
1955	94 919	21 540	34 225	26 276	3 880	19 905	51 321	75 793	24 803	5 557
1956	104 284	27 464	43 357	28 453	6 206	17 243	40 485	81 780	25 125	7 148
1957	117 424	40 238	41 353	28 912	10 169	17 095	48 287	97 638	30 433	8 763
1958	119 502	32 658	48 797	32 345	10 651	19 346	57 818	115 173	34 036	10 910
1959	133 825	28 118	67 536	37 821	14 855	16 290	63 662	117 003	44 147	11 365
1960*	165 850	33 052	92 489	48 356	16 034	20 564	84 206	133 714	47 411	14 594
Jan.-April										
1959	37 938	8 314	20 817	11 793	4 574	2 720	12 094	35 009	11 009	2 439
1960*	51 469	9 121	29 048	15 288	5 298	2 187	12 163	42 220	11 233	3 424
1961*	53 069	10 540	33 568	20 810	4 724	3 689	16 930	46 911	9 456	3 653
1960*										
June	9 952	1 779	5 457	3 675	1 272	2 307	9 125	11 331	5 346	1 508
July	12 679	2 733	8 049	3 333	1 399	3 147	11 033	10 194	3 209	1 445
Aug.	12 480	2 703	6 843	3 513	808	3 302	10 447	11 237	2 484	1 352
Sept.	13 687	3 493	6 174	3 548	1 446	3 133	9 722	12 456	2 759	1 566
Oct.	14 202	3 503	7 538	3 939	1 648	2 268	8 856	11 723	9 816	1 278
Nov.	15 589	3 183	7 448	4 756	1 039	1 637	8 182	11 087	2 974	1 620
Dec.	16 828	3 598	8 057	5 286	1 677	1 200	7 469	13 305	6 477	1 256
1961*										
Jan.	13 149	2 673	7 901	4 118	1 159	923	5 043	10 639	1 956	905
Feb.	12 692	2 246	6 967	5 556	1 715	775	3 266	11 694	2 548	876
March	14 079	3 853	9 639	5 502	792	788	3 719	13 345	2 645	1 005
April	13 149	1 768	9 061	5 634	1 058	1 203	4 902	11 233	2 307	867



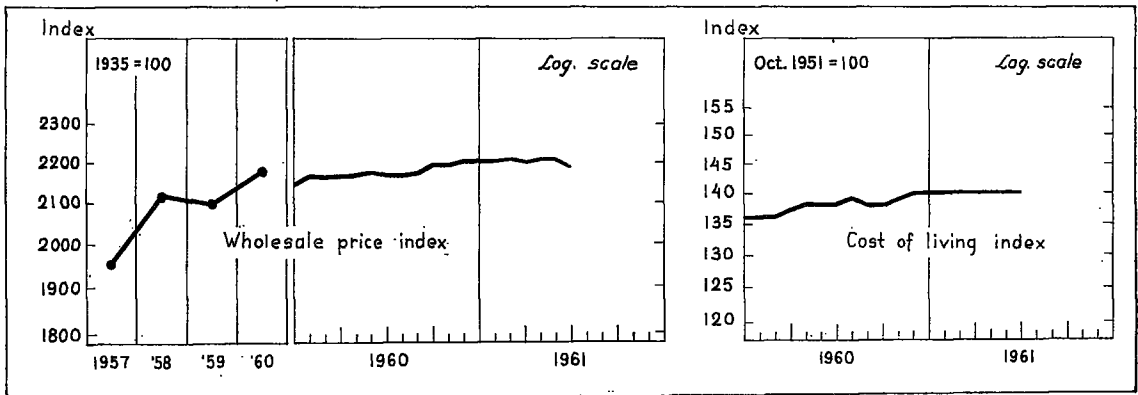
EXPORTS OF SOME IMPORTANT ARTICLES

Period	Round timber 1 000 solid cu. m	Sawn timber 1 000 stds	Veneers and plywood 1 000 cu. m	Mechanical pulp 1 000 tons	Sulphite pulp 1 000 tons	Sulphate pulp 1 000 tons	Board 1 000 tons	Fibre building board 1 000 tons	Newsprint 1 000 tons	Paper, all kinds 1 000 tons
1952	5 112	611	222	143	477	245	65	44	392	569
1953	2 388	688	216	204	464	323	76	45	402	677
1954	3 620	733	298	193	580	375	101	59	392	751
1955	4 977	786	321	183	682	447	110	61	470	905
1956	4 424	648	230	186	679	452	106	49	537	997
1957	4 063	719	260	165	697	474	134	60	551	1 108
1958	3 861	762	239	143	725	476	145	83	585	1 147
1959	3 812	950	296	139	770	549	142	110	576	1 244
1960*	5 067	1 137	358	176	919	500	150	128	691	1 459
Jan.-April										
1959	622	144	93	50	219	164	40	34	188	386
1960*	511	102	119	52	298	163	52	43	223	461
1961*	734	169	119	47	278	162	51	47	241	540
1960*										
June	502	134	33	20	85	40	12	10	50	118
July	752	176	23	9	69	33	12	11	58	111
Aug.	772	165	21	15	75	38	11	7	59	128
Sept.	733	139	31	15	78	48	13	10	66	137
Oct.	524	125	26	16	73	38	13	11	65	132
Nov.	357	105	40	13	65	49	11	13	53	119
Dec.	615	92	36	15	111	54	14	11	62	141
1961*										
Jan.	207	55	32	13	70	36	11	12	56	118
Feb.	133	26	31	11	66	38	13	11	60	139
March	160	31	30	12	82	43	15	13	69	154
April	234	57	26	11	60	45	12	11	56	129



FOREIGN TRADE BY COUNTRIES

Area and country	Imports, c. i. f.				Exports, f. o. b.					
	Whole year		Jan. - April		Whole year		Jan. - April			
	1959	1960*	1960*	1961*	1959	1960*	1960*	1961*	Mill. mk	
Sterling area	%	%	%	%	Mill. mk	%	%	%	%	Mill. mk
United Kingdom	16.3	16.5	16.7	16.1	19 060	26.6	27.9	26.4	27.4	23 415
Other OEEC countries ..	15.7	15.9	16.2	15.6	18 364	23.3	24.5	22.5	23.6	20 179
Austria	49.1	53.3	51.7	54.5	64 295	36.5	40.0	38.1	42.1	35 950
Belgium-Luxembourg	0.6	0.8	0.6	0.7	871	0.2	0.1	0.3	0.3	220
Denmark	2.5	3.1	2.9	2.4	2 772	3.7	3.7	2.6	3.2	2 737
France	2.3	2.6	2.5	3.6	4 223	3.3	3.5	3.2	2.9	2 499
Western Germany	5.1	5.7	6.7	4.9	5 763	4.8	4.7	4.3	4.9	4 140
Italy	18.0	19.3	18.9	20.7	24 417	10.9	11.6	11.6	12.5	10 657
Netherlands	1.8	1.7	1.7	2.1	2 428	1.8	2.1	2.3	3.3	2 796
Norway	4.6	4.6	3.9	3.8	4 510	5.3	6.1	5.6	5.6	4 813
Portugal	1.6	1.5	1.3	1.8	2 099	0.7	1.3	1.1	1.7	1 453
Spain	0.2	0.2	0.2	0.2	184	0.1	0.1	0.1	0.1	53
Sweden	0.5	0.7	0.6	0.5	637	0.2	0.2	0.2	0.6	526
Switzerland	9.1	10.4	9.7	10.9	12 910	3.2	4.8	5.4	5.0	4 292
Eastern Bloc	2.2	2.2	2.3	2.6	3 006	0.4	0.6	0.4	0.6	517
China	24.8	20.6	21.0	19.6	23 074	23.5	19.5	19.1	17.5	14 893
Czechoslovakia	0.5	0.2	0.3	0.2	198	2.0	0.7	0.2	0.5	435
Eastern Germany	1.4	1.1	1.4	1.1	1 334	0.7	0.9	0.7	1.0	863
Poland	1.6	1.4	1.2	1.4	1 637	1.3	1.3	1.3	1.1	951
Soviet Union	2.8	2.5	1.6	1.7	2 019	2.1	1.7	2.0	2.5	2 159
U.S. and Canada	17.8	14.7	15.8	14.2	16 770	16.8	14.2	14.0	11.5	9 835
United States	5.4	6.0	6.9	6.8	7 979	5.9	5.1	7.8	5.1	4 386
Latin America	5.1	5.7	6.7	6.6	7 733	5.8	5.0	7.7	5.0	4 283
Argentina	3.5	2.7	2.7	2.0	2 329	4.9	5.1	6.4	5.0	4 227
Brazil	0.5	0.5	0.4	0.3	325	0.9	1.1	1.4	1.3	1 104
Others	2.5	1.8	1.7	1.3	1 509	2.8	2.9	3.2	2.4	2 040
Grand total	0.9	0.9	1.0	1.0	1 250	2.6	2.4	2.2	2.9	2 492
of which	100.0	100.0	100.0	100.0	17 987	100.0	100.0	100.0	100.0	85 363
EFTA countries	31.7	33.5	32.7	35.3	41 657	31.3	34.9	32.9	34.2	29 213
EBC countries	32.0	34.4	34.1	33.8	39 890	26.5	28.1	26.3	29.5	25 143



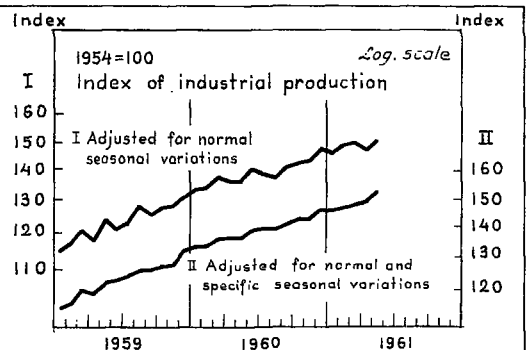
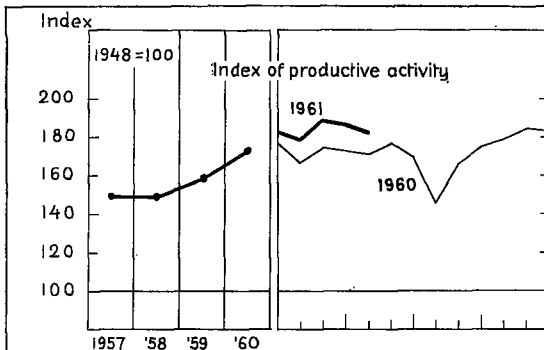
PRICE INDEXES

Period	Wholesale prices 1935 = 100						Building costs 1951 = 100		
	Total index	Finnish goods				Imported goods	Total	Building material	Workers' average hourly earnings
		Total	Products of agriculture	Products of forestry	Products of industry				
1958	2 113	2 125	2 193	3 106	1 773	2 085	117	112	124
1959	2 096	2 134	2 198	3 060	1 801	2 016	118	110	128
1960	2 178	2 253	2 338	3 313	1 868	2 016	122	114	135
1960									
June	2 168	2 239	2 338	3 242	1 868	2 017	122	114	134
July	2 170	2 246	2 360	3 243	1 873	2 010	123	114	136
Aug.	2 173	2 247	2 294	3 307	1 875	2 014	123	115	135
Sept.	2 191	2 275	2 285	3 452	1 875	2 011	124	114	140
Oct.	2 192	2 283	2 281	3 495	1 875	1 998	126	114	145
Nov.	2 205	2 299	2 368	3 495	1 873	2 003	125	114	143
Dec.	2 202	2 296	2 333	3 495	1 879	2 002	125	114	142
1961									
Jan.	2 203	2 295	2 312	3 494	1 885	2 006	125	114	141
Feb.	2 210	2 304	2 320	3 529	1 885	2 011	126	114	143
March	2 202	2 294	2 275	3 529	1 883	2 006	127	115	144
April	2 206	2 299	2 260	3 564	1 884	2 009	127	114	145
May	2 210	2 303	2 266	3 563	1 890	2 011	128	114	147
June	2 188	2 296	2 223	3 565	1 890	1 958	128	114	148

Period	Cost of living Oct. 1951 = 100						Consumer prices Oct.—Dec. 1957 = 100					
	Total	Food-stuffs	Rent	Heating and lighting	Clothing	Other	Total	Food-stuffs	Rent	Heating and lighting	Clothing	Other
1958	132	140	277	102	83	129	103	103	102	99	103	105
1959	134	141	280	98	85	134	105	103	104	95	105	109
1960	138	147	298	98	86	136	108	108	110	95	107	111
1960												
June	138	148	295	97	86	136	108	109	109	94	106	111
July	139	149	295	97	86	136	109	110	109	94	107	111
Aug.	138	148	295	97	86	136	109	109	109	94	107	111
Sept.	138	148	295	97	87	136	109	109	109	95	108	111
Oct.	139	146	306	98	87	136	109	107	113	95	108	111
Nov.	140	149	306	98	87	136	110	109	113	95	108	111
Dec.	140	149	306	99	87	137	110	110	113	96	108	111
1961												
Jan.	140	150	306	99	87	137	110	110	113	96	108	112
Feb.	140	151	306	100	87	135	110	111	113	97	108	110
March	140	150	306	99	87	135	110	110	113	97	108	110
April	140	150	306	99	87	136	110	111	113	97	108	111
May	140	151	306	100	87	136	110	111	113	97	108	111
June	140	149	306	99	87	136	110	109	113	97	108	111

PRODUCTION - INTERNAL TRADE

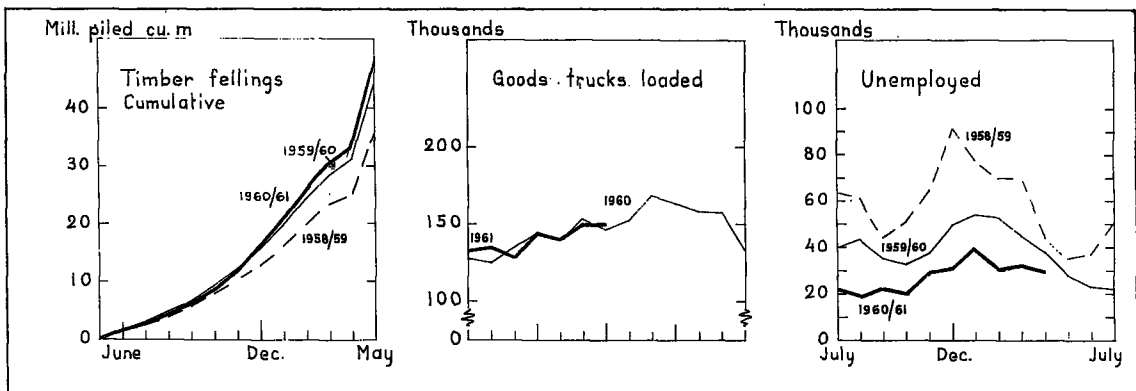
Period	Index of industrial production 1954 = 100									Commercial timber fellings 1 000 piled cu. m	Wholesale trade volume index 1954 = 100
	Total	Investment goods	Other producer goods	Consumer goods	Special indexes of manufacturing				Total, adjusted for normal seasonal variations		
					Wood industry	Paper industry	Metal industry	Other			
1953										29 170	93
1954	100	100	100	100	100	100	100	100	100	35 370	100
1955	111	116	109	113	99	115	111	111	111	38 600	116
1956	114	117	110	120	76	122	113	118	114	36 623	121
1957	117	119	116	118	82	134	115	117	118	40 919	114
1958	113	111	113	112	87	134	107	110	113	37 981	109
1959	123	118	125	122	98	144	120	120	123	38 100	121
1960*	140	140	143	134	122	167	140	132	139	44 593	136
1960*											
Jan.	127	127	132	120	101	158	128	116	133	4 094	101
Feb.	137	140	140	130	125	163	139	127	134	4 680	119
March	154	160	156	147	145	179	159	143	137	4 084	134
April	134	131	135	134	131	149	133	130	136	2 597	139
May	145	144	148	141	139	172	145	137	136	13 081	144
June	135	134	136	134	139	144	137	129	140	1 646	132
July	106	88	118	92	114	157	90	92	138	997	124
Aug.	141	133	141	145	110	175	132	142	137	1 684	150
Sept.	150	151	152	145	120	180	152	143	140	1 870	147
Oct.	154	157	159	144	115	188	157	146	141	2 540	147
Nov.	153	162	157	142	114	181	159	145	142	3 116	144
Dec.	141	151	145	130	107	160	151	131	147	4 204	151
1961*											
Jan.	145	151	149	135	117	184	150	129	146	4 847	113
Feb.	145	152	148	138	121	178	150	134	148	5 144	129
March	160	166	164	152	140	199	165	147	149	4 349	149
April	147	146	149	145	123	175	147	140	146	2 874	147
May	154	155	155	152	122	188	154	148	150	14 516	153



BUILDING - WAGES - TRANSPORT - EMPLOYMENT

Period	Buildings completed, mill. cu. m					Buildings under construction at end of period mill. cu. m	Index of salary and wage earners' earnings 1957 = 100			
	Total	Dwelling houses	Farm buildings	Commercial and industrial premises	Official buildings		All salary and wage earners	Wage earners in		
							Agriculture	Forestry	Manufacturing	
1958	19.29	8.46	3.08	3.57	2.93	20.38	105	103	105	
1959	19.88	8.36	3.42	4.55	2.39	20.46	110	106	111	
1960*	22.02	8.68	2.91	6.62	2.82	22.39	116	111	117	
1960*										
Jan. - Mar.	4.01	1.61	0.33	1.39	0.54	20.66	114	112	114	
Apr. - June	4.10	1.53	0.52	1.24	0.59	24.77	116	111	117	
July - Sept.	5.76	2.03	0.91	1.63	0.85	24.98	117	110	118	
Oct. - Dec.	8.15	3.51	1.15	2.36	0.84	22.39	118	111	118	
1961*										
Jan. - Mar.	4.88	2.09	0.29	2.06	0.32	21.17	

Period	Railways		Foreign shipping				Employment		Unemployment	
	Goods trucks loaded Thousands		Vessels arrived with cargo		Vessels departed 1 000 net reg. tons		1 000 persons		% of total labour force	
	1960	1961	1960	1961*	1960	1961*	1960	1961*	1960	1961*
Jan.	124	134	431	450	345	412	1 751	1 826	2.6	1.8
Feb.	135	128	284	321	319	332	1 781	1 848	2.5	1.4
March	144	143	266	386	288	434	1 777	1 844	2.1	1.5
April	138	139	350	422	366	402	1 778	1 877	1.8	1.4
May	153	150	554	591	564	629	1 834		1.3	
June	147	149	675	729	852	912	1 803		1.1	
July	153		756		1056		1 698		0.9	
Aug.	168		736		1006		1 769		0.9	
Sept.	163		576		812		1 859		1.0	
Oct.	158		563		683		1 851		0.9	
Nov.	157		575		569		1 835		1.4	
Dec.	133		519		568		1 812		1.5	



EXPLANATIONS RELATING TO THE STATISTICAL SECTION

BANK OF FINLAND

Page 3. The items of the statement of the Bank of Finland are described in Monthly Bulletin No. 10, 1955, p. 25.

Page 4. *Other foreign assets* = Foreign bills + Foreign bonds + Prepayments for exports. *Other foreign liabilities* = Mark accounts of holders abroad + Long-term foreign liabilities.

Page 5. *Treasury bills and bonds*: up to August 1953, bills, and thereafter Treasury bond loan + Treasury bill covering certain IMF and IBRD accounts (included in Other claims). *Trade and industry, Other advances* = Inland bills in foreign currency + Cheque accounts (assets) + Other claims excl. Treasury's IMF and IBRD bill, Prepayments for exports and Advances for stand-by stocks. *Liabilities* = Other short-term liabilities + Other cheque accounts + Deposits against import licences (in 1955-56) — Account of the Mortgage Bank of Finland Oy. — *Diagrams, Left: Net claims on other than banks* = Net foreign assets + Net claims on the Treasury + Net claims on the public + Finnish bonds + Finnish coin — Equalisation accounts = Notes in circulation + Bank's own funds — Net claims on the banks.

DEPOSITS BY THE PUBLIC —

ADVANCES TO THE PUBLIC — MONEY SUPPLY

Commercial bank and mortgage bank figures obtained from the official bank statistics, savings bank figures from the Central Statistical Office, other figures from the respective credit institutions or their central banks.

Page 6. *Cheque accounts in all credit institutions* relates to commercial banks, savings banks, co-operative credit societies, and mortgage banks. *Term deposits in all credit institutions* includes a small amount of deposits in mortgage banks. *Indexed deposits, high-interest deposits and tax - concession accounts* are included in term deposits.

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.

STATE FINANCES

Page 8. Official monthly figures adjusted by the Bank of Finland Institute for Economic Research. *Revenue and expenditure*: All extra-budgetary funds are included, and figures are reported on a payment basis. — Annual figures will be published in separate articles. *Debt*: Index-tied bond loans are given at their nominal values. Cash debt (net) = net debt to the Bank of Finland plus short-term debt to the Post Office Savings Bank minus cash holdings (net) of State departments. In principle, the change in this item = surplus (deficit) in the table on revenue and expenditure. The small divergence is due to the fact that the adjustment of the monthly figures is not as accurate as that of the annual (December) figures. *Diagram*. The 12-month totals are plotted to the last month of the respective periods.

FOREIGN TRADE

Pages 9-12. Figures supplied by the Board of Customs. *The unit value indexes* (p. 9): The indexes are calculated first according to the Laspeyres formula but at the end of each

year adjustments are made according to the Fisher formula, and the level of the quarterly indexes is corrected so that their arithmetic mean equals the annual index. Thus the series above and below the line are not fully comparable. Seasonal variations are not eliminated. Terms of trade: the ratio of export indexes to import indexes. *Foreign trade by countries* (p. 12): imports by countries of purchase, exports by countries of sale.

PRICE INDEXES

Page 13. *Wholesale price index* and *Building cost index* calculated by the Central Statistical Office. *Cost of living index* and *Consumer price index* calculated by the Ministry for Social Affairs.

PRODUCTION — INTERNAL TRADE

Page 14. *Index of industrial production* calculated by the Central Statistical Office. The grouping by branches of industry is in accordance with the international nomenclature (ISIC). The weight of each group represents the ratio of its value added to the total value added of industrial production in 1954. The seasonally adjusted series is calculated by the Bank of Finland Institute for Economic Research. For the method of calculation see Bulletin No. 8, 1961, p. 18. Commodities according to use: investment goods weight 12.7, other producer goods weight 54.6 and consumer goods weight 32.7. Special manufacturing indexes: wood industry ISIC no. 25, weight 8.6, paper industry no. 27, weight 8.6, metal industry nos. 34-38, weight 25.4, and other manufactures nos. 20-24, 26, 28-33, 39, weight 44.9. *Commercial timber fellings* calculated by the Ministry of Communications and Public Works. *Wholesale trade volume index*, calculated by the Ministry of Finance. Based on sales statistics compiled by the daily Uusi Suomi, covering about 50% of all internal wholesale trade. Price fluctuations have been eliminated by means of the revised wholesale price index. *Diagram, Left: Index of productive activity* calculated by the periodical Mercator. It comprises all sectors of the economy. Annual averages are revised according to national income figures.

BUILDING — WAGES — EMPLOYMENT — TRANSPORT

Page 15. *Building* figures supplied by the Central Statistical Office. *Index of salary and wage earners' earnings* calculated by the Central Statistical Office. Beginning 1957, the weights employed are determined according to the structure of total earnings in 1957; for 1954-1956, the weights are in accordance with earnings in 1951. *Railway* figures supplied by the Board of Railways. *Shipping* figures supplied by the Shipping Board. *Employment and unemployment* figures supplied by the Labour Research Bureau of the Ministry of Communications and Public Works, both based on the labour force sample survey. Employment represents the estimated average number of days worked. (See article in No. 10, 1960 of this Bulletin.) *Diagram*. Number of persons unemployed for at least one week during each month.

SYMBOLS USED

* Preliminary o Less than half the final digit shown . Logically impossible .. Not available — Nil
A line drawn across a column between two consecutive figures indicates that the figures above and below the line are not strictly comparable

SOME PARTICULARS ABOUT FINLAND

FORM OF GOVERNMENT

From 1154 to 1809 Finland formed a part of the kingdom of Sweden. It then became an autonomous Grand Duchy connected with Russia 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 the Diet and the President. The highest executive power is held by the President, elected for a period of 6 years. The President for the current period, March 1, 1956, to March 1, 1962, is Urho Kekkonen.

The Diet, comprising 200 members, is elected by universal suffrage for a period of 4 years. The number of seats of the different parties in the Diet elected in 1958 are as follows: People's Democrats 50, Agrarians 47, Social Democrats 37, Conservatives 29, Swedish Party 14, Social Democratic League 14, Finnish People's Party (liberal) 8 and Finnish Small Farmers' Party 1.

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 %. On an average 15.8 % of the land in the South of Finland is cultivated (1959), 2.3 % in the North and 9.2 % of the land as a whole. Of the land area 19.7 mill. ha (48.7 mill. acres), or 68.6 %, are covered by forests.

OWNERSHIP OF LAND (1959): The total land area was distributed among different classes of owners approximately as follows: private 56.2 %, State 34.4 %, joint stock companies etc. 8.2 %, communes 1.2 %.

POPULATION

NUMBER OF INHABITANTS (1959): 4.4 million. Sweden 7.4, Switzerland 5.2, Denmark 4.5 and Norway 3.6 million.

DENSITY OF POPULATION (1959): In South Finland 24.7, in North Finland 4.0 and in the whole country an average of 14.5 inhabitants to the square kilometre.

DISTRIBUTION BY AREA (1959): 62.4 % of the population inhabit the rural areas, 37.6 % towns and urban districts. The largest towns are: Helsinki (Helsingfors), the capital, 454 192 inhabitants, Tampere (Tammerfors) 123 686, Turku (Åbo) 122 240.

OCCUPATIONS (1950): Agriculture and forestry 42 %, industry 29 %, commerce 7 %, transport and communications 6 %, services 9 %, other economic activities 1 %, economically inactive persons 6 %.

LANGUAGE (1950): Finnish speaking 91.1 %, Swedish speaking 8.6 %, others 0.3 %.

EDUCATION (1960): Practically all persons over 15 years of age are literate. There are 5 universities (the oldest founded in 1640), 7 colleges of university standard, and 2 teachers' training colleges, besides teacher-training departments in two of the universities.

INCREASE OF POPULATION (1959): births 18.9 ‰, deaths 8.8 ‰, increase 9.4 ‰. Deaths in France 11.2 ‰ and in Great Britain 11.7 ‰.

TRADE AND COMMUNICATIONS

NATIONAL INCOME (1959, in thousand million marks): Gross domestic product at market prices 1 260 (excl. repairs and maintenance). Net domestic product at factor cost, by industrial origin: agriculture 121 (12 %), forestry and fishing 87 (9 %), manufacturing 312 (31 %), construction 103 (10 %), transport and communications 81 (8 %), commerce, banking and insurance 127 (12 %), general government 124 (12 %), other services 65 (6 %), total 1 020. Index of real domestic product 106 (1957 = 100).

FOREST RESOURCES (1951—1953): The growing stock comprised 1 493 million of solid cu. m incl. bark (52 660 million cu. ft.), of which pine 43.7 % and spruce 35.7 %, the rest 20.6 % being leaf-trees, chiefly birch. Of the growing stock, 10 900 million cu. ft, 58.0 % of them pine, was up to the standard required for logs. The annual growth is 46 million solid cu. m green wood excl. bark (1 620 mill. cu. ft.). The total removal in 1954 calculated according to the use of wood was 45 million cu. m (1 589 million cu. ft.)

AGRICULTURE (1959): Cultivated land 2.6 million hectares of which holdings of less than 5 ha amount to 17 %, 5 to 15 ha 48 %, 15 to 50 ha 30 % and more than 50 ha 5 %. Number of holdings 388 000, of which 184 000 are of more than 5 ha. Index of agricultural production 98 for 1958 (1954 = 100). Measure of self-sufficiency in the crop year 1958/59: bread cereals 52 %, animal products 120 %.

INDUSTRY (1959): Gross value of industrial production 1 068 000 mill. marks, number of workers 303 000, administrative employees 59 000, motive power (1959) 3.0 mill. HP. Index of industrial production 123 for 1959 (1954 = 100).

RAILWAYS (Jan. 1, 1961): Length 6 388 km, of which 6 314 km are State and 74 km private railways. The gauge of State railways 1.524 m.

MERCHANT FLEET (June 30, 1961): Steamers 204 (298 085 gross reg. tons), motor vessels 241 (501 188 gross reg. tons), sailing vessels with auxiliary engines 88 (9 417 gross reg. tons). Total 533 (808 690 gross reg. tons).

MOTOR VEHICLES (Dec. 31, 1960): Private cars 173 000, lorries and delivery vans 65 600, buses 5 800, others 2 100. Total 256 900.

AIR TRAFFIC: (Dec. 31, 1960) Number of aircraft in scheduled traffic 23, other aircraft 93. In 1960, 550 000 passengers were carried by the two Finnish companies; over 228 million passenger kilometres and 4.1 million ton kilometres of freight and mail were transported.

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. Since 1931, the redemption of bank notes in gold has been suspended. The currency unit is the mark (Finnish markka). Its official par value is 320 marks per one U.S. dollar. Finland has been a member of the International Monetary Fund since 1948.

MUNICIPAL FINANCES. In the finance accounts for 1958 expenditure amounted to 173 143 mill. marks. Total revenue was 168 199 million, of which income from taxation 86 041 million. The municipal income tax (non-progressive) averaged 11.64 % of the ratepayers' taxable income.

THE CENTRAL BANK. The Bank of Finland functions under the guarantee and supervision of the Diet. Its Board of Management is appointed by the President of the Republic; the Bank Supervisors, nine in number, are elected by the Diet. The Bank has a head office in Helsinki and 13 branch offices in other towns.

OTHER CREDIT INSTITUTIONS (Dec. 31, 1960). There are two big and three small commercial banks with in all 599 offices, 390 savings banks, 537 cooperative credit societies and their central bank, six mortgage societies, and the Post Office Savings Bank. The savings departments of the cooperative stores accept deposits from the public.

RATES OF INTEREST (Jan. 1, 1961). Bank of Finland discount rates 6—7 1/8 %. Other credit institutions: term deposits 4 1/8 % (12 months' deposits 5 %, index-tied deposits 3 1/8—4 %) and sight deposits in savings banks and cooperative credit societies 1/8 %; highest lending rate 8 %.

SEASONAL FLUCTUATIONS IN INDUSTRIAL PRODUCTION IN FINLAND

BY

PERTTI KUKKONEN, Mag. Pol.

FELLOW OF THE BANK OF FINLAND INSTITUTE FOR ECONOMIC RESEARCH

The Central Statistical Office has published a monthly volume index of industrial production in Finland since 1950. The index is based on a sample which now covers about 70 per cent of the gross value of industrial output; the index of industrial production has proved to be the most important indicator in appraising the economic development in real terms. However, the use of this time series as an indication of cyclical movements is disturbed by seasonal fluctuations. In a temperate zone country such as Finland, these fluctuations are large, owing to the large differences in weather conditions between seasons, and in addition display variations from year to year, according to the severity of winter, for instance. As monthly index figures are now available for eleven years, and as data are also available for the averages of the hours worked in various groups of industry, it has become possible to measure the size of seasonal fluctuations, and to eliminate them from the time series of the volume index. From this issue of the Bulletin onwards, the seasonally adjusted series of the whole industry will be published in the Table „Production — Internal Trade”, on p. 14, alongside the original series. An outline of the method employed in computing the seasonally adjusted series is given in the following, along with some facts revealed by the analysis concerning the nature of the seasonal fluctuations

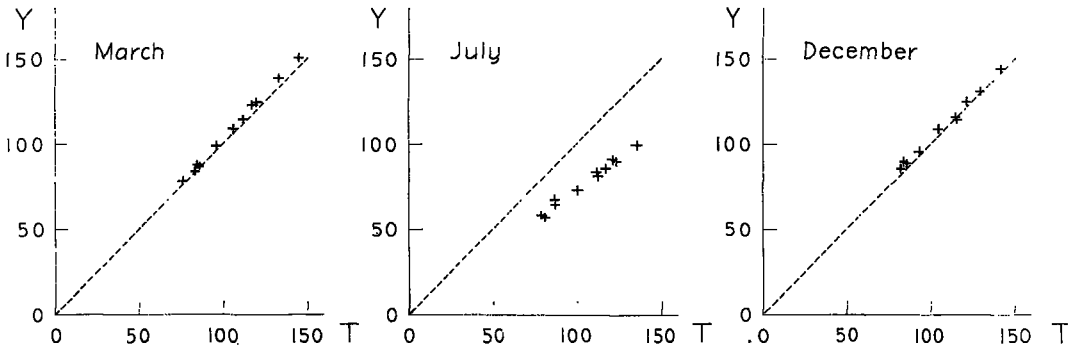
under consideration. In autumn 1961, it is intended that a more detailed account of the analysis of the seasonal fluctuations will be published, in the series „Taloudellisia selvityksiä — Ekonomiska utredningar”, published by the Bank of Finland Institute for Economic Research.

THE WORKING DAY INDEX OF INDUSTRIAL PRODUCTION

The basic series of the analysis of seasonal fluctuations was provided by the volume index of industrial output per working day. This series was obtained by elimination from the original monthly index of those fluctuations which result from the effect of the different lengths of the months, the different numbers of Saturdays and Sundays, and of holidays upon the hours worked, and through them upon industrial output. In the analysis of seasonal fluctuations, it was found that this adjustment had a decisive significance to the accuracy of the results. The adjustment for the working days changes the level of the monthly index by varying amounts in different years. In those months in which fall the moving holidays of our calendar, the difference between the adjustments sometimes exceeds 10 per cent. The shifts caused by the adjustment in the average levels for different months amount in some instances to 7—8 per cent.

SCATTER DIAGRAM OF THE INDEX OF INDUSTRIAL PRODUCTION PER WORKING DAY (Y) AND THE SYSTEMATIC COMPONENT (T)

+ pairs of observations - - - - - line Y=T



THE PRELIMINARY ANALYSIS

Seasonal fluctuations in a time series are attributable partly to meteorological factors, partly to seasonal fluctuations in other economic phenomena, and partly to traditional customs and to factors dependent on the calendar, such as holidays and vacations. As the primary object of this study was the construction of a seasonally adjusted volume index suitable for use in the analysis of cyclical fluctuations, the above-mentioned phenomena responsible for seasonal fluctuations were not made the subject of a detailed examination. Instead, efforts were concentrated on a statistical measurement of the size of average or so-termed normal seasonal fluctuation, along with the analysis of the deviations from this normal ascribable to the phase of cyclical movements and to meteorological factors. An attempt was made to break down the series of the working day index (Y) into three components: a systematic component (T), a seasonal component (P) and a rest component (ϵ). In the seasonal fluctuations component, again, a component of normal seasonal fluctuations and a component due to meteorological and cyclical fluctuations were distinguished.

A start on the analysis was made by attempting to discover the best way to describe the interrelation of the seasonal and the systematic component. The choice was made between the two simplest alternatives, viz., the additive and the multiplicative form. If the first alternative is considered, the seasonal component for each particular month is a constant independent of the size of the systematic component, while in the second case it is proportional to the values of the systematic component. The 12-month moving average of the working day index was used as an approximation to the systematic component. The analysis was effected by drawing the scatter diagrams of the working day index (Y) and the systematic component (T) separately for each month, and it was augmented by means of regression analysis.¹⁾ Scatter diagrams for three months with different types of seasonal fluctuations are given in the appended graph.

In the series for most months, the seasonal fluctuation proved to be approximately multiplicative. Exceptions were provided by the series for November and December, but a further examination revealed that this

¹⁾ Use was made of regression models of the following type:

$$(1) Y_{mt} = a_m + b_m T_{mt} + \epsilon_{mt}$$

where the subscript m refers to the month ($m = 1, 2, \dots, 12$) and the subscript t to the year ($t = 1950, 1951, \dots, 1960$) and a and b are regression coefficients computed for the models of each particular month.

could be explained in terms of a declining trend in the relative seasonal fluctuation in December and a correspondingly rising trend in November. In combination, these trends indicate a change that is taking place in the form of the seasonal fluctuation. The seasonal maximum of the autumn is moving from December to November.

These computations already gave relatively reliable estimates of the multiplicative seasonal fluctuations. The seasonal fluctuation component thus obtained was subtracted from the series of the working day index in order to obtain a first approximation to the seasonally adjusted volume series. By employing a 15-term weighted moving average, there was computed an improved approximation to the systematic component necessary for the following stage of the analysis.

THE SECOND STAGE OF THE ANALYSIS

Deviations from the normal in weather conditions during each season cause short-term oscillations in the time series of the volume of production. These oscillations put difficulties in the way of drawing conclusions on cyclical movements, even after the elimination of the normal seasonal fluctuations. As will be seen later, cyclical movements also cause deviations from normal seasonal fluctuations. With the intention of eliminating these specific seasonal fluctuations from the series of the volume index of industrial production, their occurrence was explored by the utilisation of a regression technique, in which the deviations in the seasonal fluctuations from the normal were considered as a variable, dependent upon weather and cyclical-movement variables. The

coefficients of the mathematical formula thus obtained were determined by the least-squares method on the basis of the observational series for January 1960—April 1961. Account was taken of the multiplicative character of the seasonal fluctuations, by regarding the difference between the logarithms of the working day index and its systematic component as the dependent variable.¹⁾

NORMAL SEASONAL FLUCTUATION

The second stage of the analysis yielded an improved estimate for the normal seasonal fluctuation component, which differed but slightly from the estimate given by the preliminary analysis. The most essential difference was that trend-like movements were discovered in the seasonal fluctuations for October as well. The following Table indicates the size of the normal seasonal fluctuations as a percentage of the systematic component.

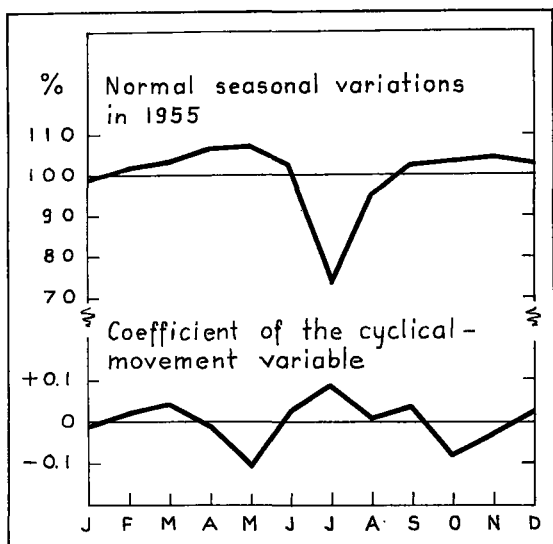
	1950—1960		
January		99.0	
February		101.6	
March		103.1	
April		106.5	
May		106.7	
June		101.5	
July		73.7	
August		95.3	
September		102.4	
	1950	1955	1960
October	102.3	103.2	104.1
November	102.6	104.1	105.5
December	105.3	102.9	100.6

The Table shows that the change in the normal seasonal fluctuation in the last months of the year has been a relatively abrupt one. However, it is by no means certain that this development will continue outside the time period studied. The coef-

1) Denoting the cyclical-movement variable by C , the weather-condition variables by W_1, W_2, \dots, W_k , the coefficient indicating the level of normal seasonal fluctuations by b' , and the coefficients for the independent variables by e and d^1, d^2, \dots, d^k , the expression assumes the form:

$$(2) \text{Log } Y_{mt} - \text{Log } T_{mt} = b_m + e_m C_{mt} + \sum_{i=1}^k d_m^i W_{mt}^i + \epsilon_{mt}$$

the meaning of m and t being the same as in model (1). The number of the weather-condition variables k is 2 or 3 depending on the month. The expressions for October, November and December involve an additional linear trend variable.



ficients of the trend variable — as well as those of the other variables — will therefore be recomputed from time to time in connection with the elimination of the seasonal fluctuations. The coefficients of the normal seasonal fluctuations and the cyclical-movement variable are seen in the above graph.

THE EFFECT OF CYCLICAL MOVEMENTS ON SEASONAL FLUCTUATIONS

The above graph reveals an obvious interrelation between the coefficient of normal seasonal fluctuation and that of the cyclical-movement variable. The coefficient of the cyclical-movement variable assumes its highest value in July, when the normal seasonal fluctuation is at its lowest point, and its lowest values in April—May and October—November, the peaks of the normal seasonal fluctuation. This entails that the effect of cyclical movements is such that seasonal fluctuations are dampened to some degree during upswing and boom periods. The magnitude of the effect of the cyclical-movement variable is evident from the following Table, in which it has been presented as a percentage of the sum total of the other components during the boom in 1956, and during the cyclical trough in 1958.

	1956		1958	
	Cyclical-movement variable ¹⁾	Effect, per cent	Cyclical-movement variable ¹⁾	Effect, per cent
January	+ 6.7	- 0.2	- 5.2	+ 0.1
February	+ 6.9	+ 0.3	- 6.1	- 0.2
March	+ 7.4	+ 0.6	- 6.9	- 0.6
April	+ 8.1	- 0.2	- 7.7	+ 0.2
May	+ 8.8	- 2.2	- 8.2	+ 2.0
June	+ 9.2	+ 0.6	- 8.4	- 0.5
July	+ 9.3	+ 1.8	- 8.2	- 1.5
August	+ 9.0	+ 0.2	- 7.9	- 0.2
September ...	+ 8.6	+ 0.6	- 7.6	- 0.5
October	+ 8.2	- 1.6	- 7.5	+ 1.5
November ...	+ 7.8	- 0.6	- 7.5	+ 0.7
December	+ 7.3	+ 0.3	- 7.5	- 0.5

¹⁾ The cyclical-movement variable has been computed as the percentage deviation of the systematic component from the linear trend.

The dampening of seasonal fluctuations during boom periods is likely to result from the fact that, when both the labour force and the capital capacity of the industry are employed to a sufficiently high degree, the existing capacity sets limits for the rate of increase in output in the months of seasonal maximum. The result is that productive activity is partly shifted to the months in which the normal seasonal level of output is lower.

The cyclical-movement variable enters our computations in a linear way. Some curvilinear form might have been preferable, but the data for the years 1950—1960 were not sufficient for the determination of such a form.

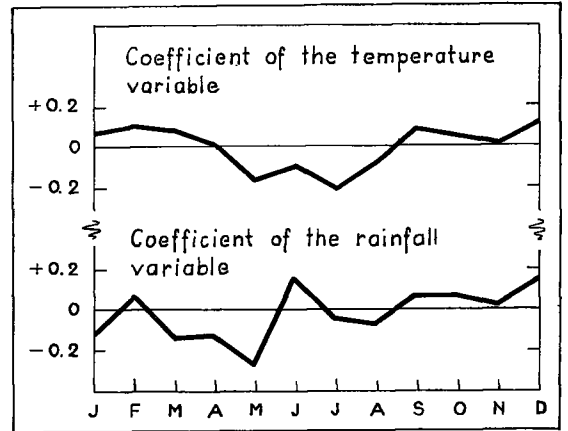
THE EFFECT OF WEATHER CONDITIONS

The weather condition variables cause short-term oscillations in the volume of industrial production chiefly in the form that production is partly shifted to the months most favourable as regards weather conditions. This should be particularly emphasized, since the apparent effect of these variables in our calculations is constituted by increases or decreases in output. However, this is only the immediate effect, whereas computations cannot reveal the counter-effect which is divided between several months. It is usually involved in

the systematic component. An exception is provided by the variations of temperature in the winter months, i.e., in January—March, when a lower than average temperature decreases the volume of production in these months, but increases it in April.

The direction of the effect of temperature in various months is seen from the adjacent graph. In autumn and winter, the deviations of temperature from the normal receive positive, but in spring and summer negative coefficients. For example, a temperature higher than normal in the summer months tends to decrease the volume of production.

In the winter months, the variations in temperature affect the volume of industrial production partly through their effect on the ice conditions on the coasts. As not only the thickness of ice, but also the effectiveness of the operations of ice-breakers affects shipping, and as neither of these factors is



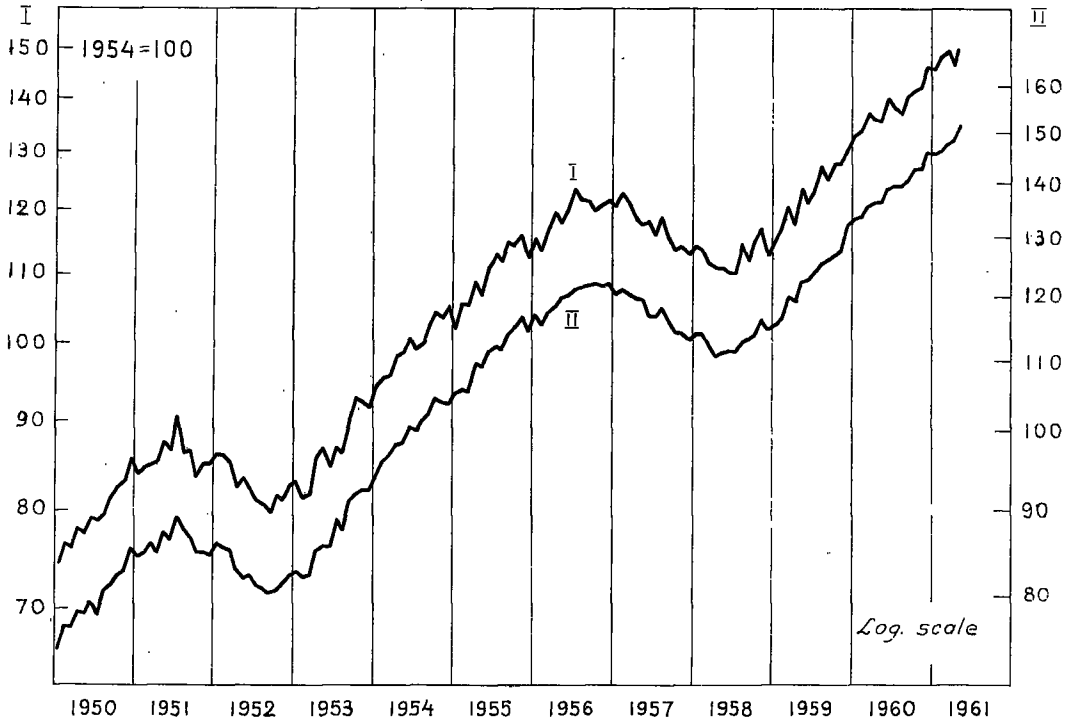
involved in the temperature variable, the time during which the ports are closed was used to represent them.

The order of magnitude of the influence of temperature is illustrated by the following Table, showing this effect in 1959 as a percentage of the sum total of the other components. The figures for January—

INDEX OF INDUSTRIAL PRODUCTION PER WORKING DAY

I adjusted for normal seasonal variations

II adjusted for normal and specific seasonal variations



April also reflect the effect of the variable representing ice conditions. Inspection of the figures reveals that the winter of 1959 was considerably warmer than normal, and that a higher than normal temperature continued to prevail until autumn.

	Deviation of temperature from the nor- mal, in degrees Centigrade	Effect on the volume of production, per cent
January	+ 1.1	+ 0.2
February	+ 5.1	+ 0.9
March	+ 4.6	+ 0.9
April	+ 3.6	- 1.3
May	+ 0.8	- 0.3
June	+ 0.9	- 0.2
July	+ 1.4	- 0.7
August	+ 1.2	- 0.3
September	- 1.7	- 0.3
October	- 0.6	- 0.0
November	+ 1.0	- 0.0
December	- 2.5	- 0.8

The upper graph on p. 22 shows that the coefficient of rainfall does not change from one season to another as evenly as does the coefficient of temperature. The effect of the rainfall variable is of the same order of magnitude as that of the temperature variable.

THE SEASONALLY ADJUSTED SERIES

Finally, the chief results of the computations, i. e., the seasonally adjusted series of the working day index, are represented diagrammatically at the foot of the previous page. One of the two series is adjusted according to the normal seasonal fluctuations, while the effect of weather-condition and cyclical-movement variables is also eliminated from the other.

ITEMS

Change of Government. On June 29, Prime Minister V. J. Sukselainen (Agrarian) tendered his resignation, and following its acceptance by the President of the Republic on July 3, the whole Cabinet resigned. The President requested Cabinet members to discharge the duties of their office until a new Government had been formed, and during this interval, the duties of Prime Minister were discharged by Mr Eemil Luukka, Minister of the Interior. The Sukselainen Cabinet had been formed on January 13, 1959 as a minority one based on the Agrarian Party.

No success was met in the endeavours to form a majority Cabinet, and accordingly a new minority Cabinet, again based upon the Agrarian Party, was formed on July 14 by Mr Martti Miettunen, Governor of the Province of Lapland. Mr Eemil Luukka is the Deputy Prime Minister, Mr Ahti Karjalainen, Member of the Board of Management of the Bank of Finland, is Minister for Foreign Affairs, Mr Wiljam Sarjala and Mr J. E. Niemi are Ministers of Finance and

Mr Ilmari Hustich is Minister of Trade and Industry. With the exception of Mr Hustich, all the members of the Cabinet belong to the Agrarian Party.

*

Imports of round timber from the USSR. On May 18, an agreement was signed by whose terms Finland will purchase round timber from the USSR for a period of twenty years. The volume varies annually from 350 000 solid cu. m to 600 000 cu. m, and in 1964 and the following years will be 600 000 cu. m. Prices are determined in roubles on the basis of world market prices.

*

Finland's population. According to provisional census data, the population of Finland on Dec. 31, 1960 was 4 449 000.

*

Publications of the Bank of Finland. In Series B, the following new publication has appeared: 20. J. J. Paunio, A Study in the Theory of Open Inflation. Issued in English. Helsinki 1961, 141 p. — The original Finnish edition was published in 1959.

BANK OF FINLAND

BOARD OF MANAGEMENT

KLAUS WARIS,
Governor

ESKO K. LEINONEN

A. SIMONEN

AHTI KARJALAINEN
*(Absent as a member of
Government)*

REINO ROSSI

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Credits

PERTTI TAMMIVUORI,
Administration

EERO ASP,
Foreign affairs

JOUKO J. VOUTILAINEN,
Foreign affairs; Information

K. IGNATIUS,
Administration

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Personnel

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(trade)*

P. BLOMQUIST,
Accounts

P.-E. ÖSTERLUND,
*Foreign exchange
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*Documentary credits
and control*

HELGE LINDSTRÖM,
Credits

ARTHUR ASPELUND,
Cash

EINO JUSSILA,
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