

Monetary Control: Detailed Arrangements
Consequent on the Publication of the Green
Paper 1980

File FEU/2/6/09

PART 7

30/4/1980 – 8/10/1980

Pages 117-133

1.10 MONETARY AGGREGATES AND INTEREST RATES

Item	1979		1980		1980					Targets Q4 79- Q4 80
	Q3	Q4	Q1	Q2	Feb.	Mar.	Apr.	May	June	
Monetary and credit aggregates (annual rates of change, seasonally adjusted in percent) ¹										
<i>Member bank reserves</i>										
1 Total	5.0	12.7	4.4	2.0	-0.8	4.4	4.3	-0.9	-1.0	
2 Required	4.7	11.7	5.4	2.0	0.3	4.6	2.7	1.3	-1.8	
3 Nonborrowed	6.9	7.1	3.6	8.1	-12.7	-29.3	15.5	41.1	17.1	
4 Monetary base ²	9.3	9.7	7.6	5.4	7.5	6.9	1.7	7.7	6.1	
<i>Concepts of money and liquid assets³</i>										
5 M-1A	7.8	4.5	4.8	-3.9	9.4	-1.9	-17.7	.7	11.4	3 1/2-6
6 M-1B	9.6	5.0	5.9	-2.4	9.9	-3	-14.1	-1.6	14.9	4-6 1/2
7 M-2	10.7	7.1	7.2	5.4	9.5	5.0	-2.6	9.8	17.5	6-7
8 M-3	10.8	9.1	7.8	5.7	11.8	4.4	.0	8.9	12.8	6 1/2-9 1/2
9 L	12.2	8.5	8.4	n.a.	11.5	7.9	5.6	8.9	n.a.	
<i>Time and savings deposits</i>										
<i>Commercial banks</i>										
10 Total	9.1	12.4	8.4	9.8	14.6	8.5	15.0	6.6	-1.6	
11 Savings ⁴	4	-16.5	-19.3	-22.6	-22.5	-35.6	-43.3	-7.5	32.9	
12 Small-denomination time ⁵	22.5	32.1	29.1	33.9	25.9	42.5	54.4	14.1	-3.1	
13 Large-denomination time ⁶	-5	19.7	11.3	10.1	34.0	7.6	16.2	8.5	-24.8	
14 Thrift institutions ⁷	7.4	6.7	2.7	4.9	1.6	4.0	3.0	7.9	9.2	
15 Total loans and securities at commercial banks ⁸	13.4	8.7	9.4	-.5	18.7	2.6	-4.3	-6.1	-2.8	
Interest rates (levels, percent per annum)										
Short-term rates										
16 Federal funds ⁹	10.94	13.58	15.07	12.67	17.19	17.61	10.98	9.47	9.03	
17 Federal Reserve discount ¹⁰	10.21	11.92	12.51	12.45	13.00	13.00	12.94	11.40	10.87	
18 Treasury bills (3-month market yield) ¹¹	9.67	11.84	13.35	9.62	15.70	13.20	8.58	7.07	8.06	
19 Commercial paper (3-month) ^{11,12}	10.64	13.35	14.54	11.18	16.81	15.78	9.49	8.27	8.41	
Long-term rates										
<i>Bonds</i>										
20 U.S. government ¹³	9.03	10.18	11.78	10.58	12.49	11.42	10.44	9.89	10.32	
21 State and local government ¹⁴	6.28	7.20	8.23	7.95	9.17	8.63	7.59	7.63	8.13	
22 Aaa utility (new issue) ¹⁵	9.64	11.21	13.22	11.78	14.00	12.90	11.53	10.90	11.60	
23 Conventional mortgages ¹⁶	11.13	12.38	14.32	12.70	16.05	15.55	13.20	12.45	12.45	

1. Unless otherwise noted, rates of change are calculated from average amounts outstanding in preceding month or quarter. Growth rates for member bank reserves are adjusted for discontinuities in series that result from changes in Regulations D and M.
 2. Includes total reserves (member bank reserve balances in the current week plus vault cash held two weeks earlier), currency outside the U.S. Treasury, Federal Reserve Banks, and the vaults of commercial banks; and vault cash of nonmember banks.
 3. M-1A: Averages of daily figures for (1) demand deposits at all commercial banks other than those due to domestic banks, the U.S. government, and foreign banks; and official institutions less cash items in the process of collection and Federal Reserve float; and (2) currency outside the Treasury, Federal Reserve banks, and the vaults of commercial banks.
 M-1B: M-1A plus negotiable order of withdrawal and automated transfer service accounts at banks and thrift institutions, credit union share draft accounts, and demand deposits at mutual savings banks.
 M-2: M-1B plus savings and small-denomination time deposits at all depository institutions, overnight repurchase agreements at commercial banks, overnight Eurodollars held by U.S. residents other than banks at Caribbean branches of member banks, and money market mutual fund shares.
 M-3: M-2 plus large-denomination time deposits at all depository institutions and term RPs at commercial banks and savings and loan associations.
 L: M-3 plus other liquid assets such as term Eurodollars held by U.S. residents other than banks, bankers acceptances, commercial paper, Treasury bills and other liquid Treasury securities, and U.S. savings bonds.

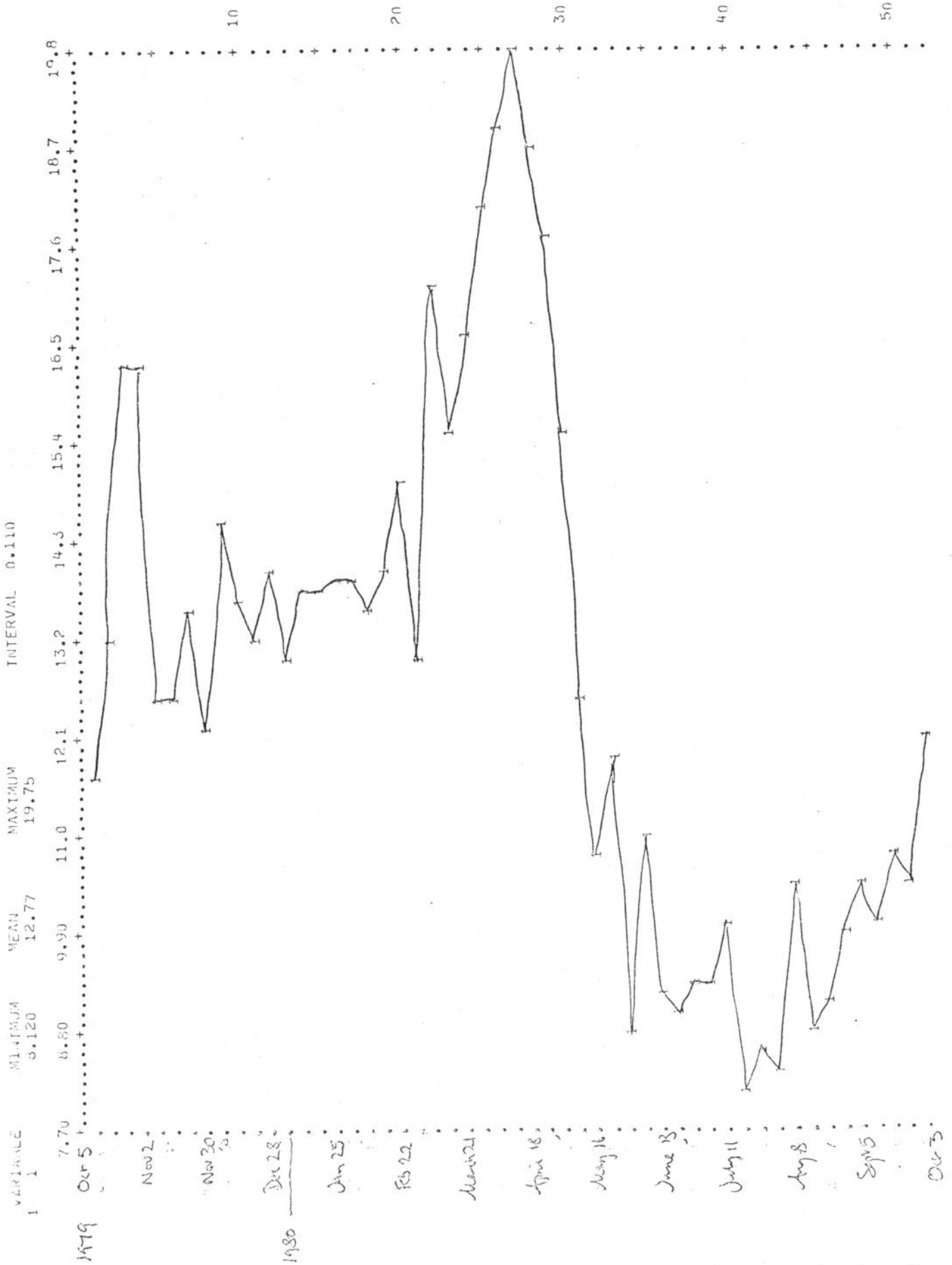
4. Savings deposits exclude NOW and ATS accounts at commercial banks.
 5. Small-denomination time deposits are those issued in amounts of less than \$100,000.
 6. Large-denomination time deposits are those issued in amounts of \$100,000 or more.
 7. Savings and loan associations, mutual savings banks, and credit unions.
 8. Changes calculated from figures shown in table 1.23.
 9. Averages of daily effective rates (average of the rates on a given date weighted by the volume of transactions at those rates).
 10. Rate for the Federal Reserve Bank of New York.
 11. Quoted on a bank-discount basis.
 12. Beginning Nov. 1977, unweighted average of offering rates quoted by at least five dealers. Previously, most representative rate quoted by these dealers before Nov. 1979, data shown are for 90- to 119-day maturity.
 13. Market yields adjusted to a 20-year maturity by the U.S. Treasury.
 14. Bond Buyer series for 20 issues of mixed quality.
 15. Weighted averages of new publicly offered bonds rated Aaa, Aa, and A by Moody's Investors Service and adjusted to an Aaa basis. Federal Reserve compilations.
 16. Average rates on new commitments for conventional first mortgages on new homes in primary markets, unweighted and rounded to nearest 5 basis points, from Dept. of Housing and Urban Development.

Source : Federal Reserve Bulletin, August 1980.

CHART 1

FED FUNDS RATE EACH FRIDAY

172903 001090



GRAPH OF THE DATA

THE GRAPH IS IN THE METER EXPRESSED AT AN 'ANNUAL RATE' (UNUSUAL AS THE YEAR IS 1980)

112554 000000



INTERVAL 0.340

VARIABLE	MINIMUM	MEAN	MAXIMUM
1 A1A	-17.73	0.5139	11.40
2 A2	-2.600	1.817	17.50

1979 Oct Nov Dec Jan Feb Mar Apr May June

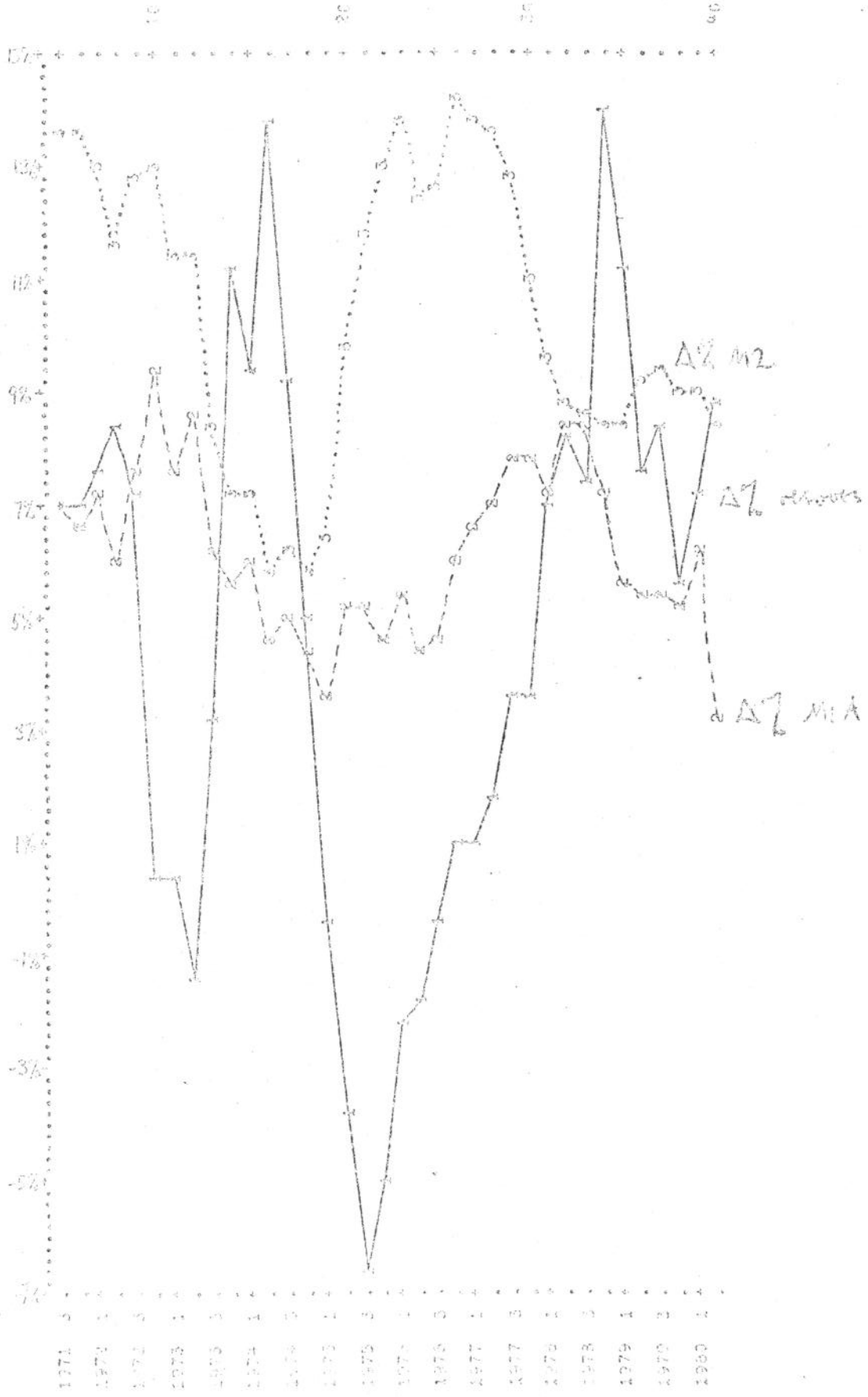
Reserves, M1 and M2 - percentage change on same quarter of previous year

11551 071007

INTERVAL 2.000-03

MAXIMUM	MEAN	MINIMUM
4.4631-00	4.4631-00	0.1301
5.4553-02	5.4553-02	0.1301
5.4553-02	5.4553-02	0.1301
5.4553-02	5.4553-02	0.1301

MAXIMUM	MEAN	MINIMUM
4.4631-00	4.4631-00	0.1301
5.4553-02	5.4553-02	0.1301
5.4553-02	5.4553-02	0.1301
5.4553-02	5.4553-02	0.1301



$\Delta^2 M2$

Δ^1 Reserves

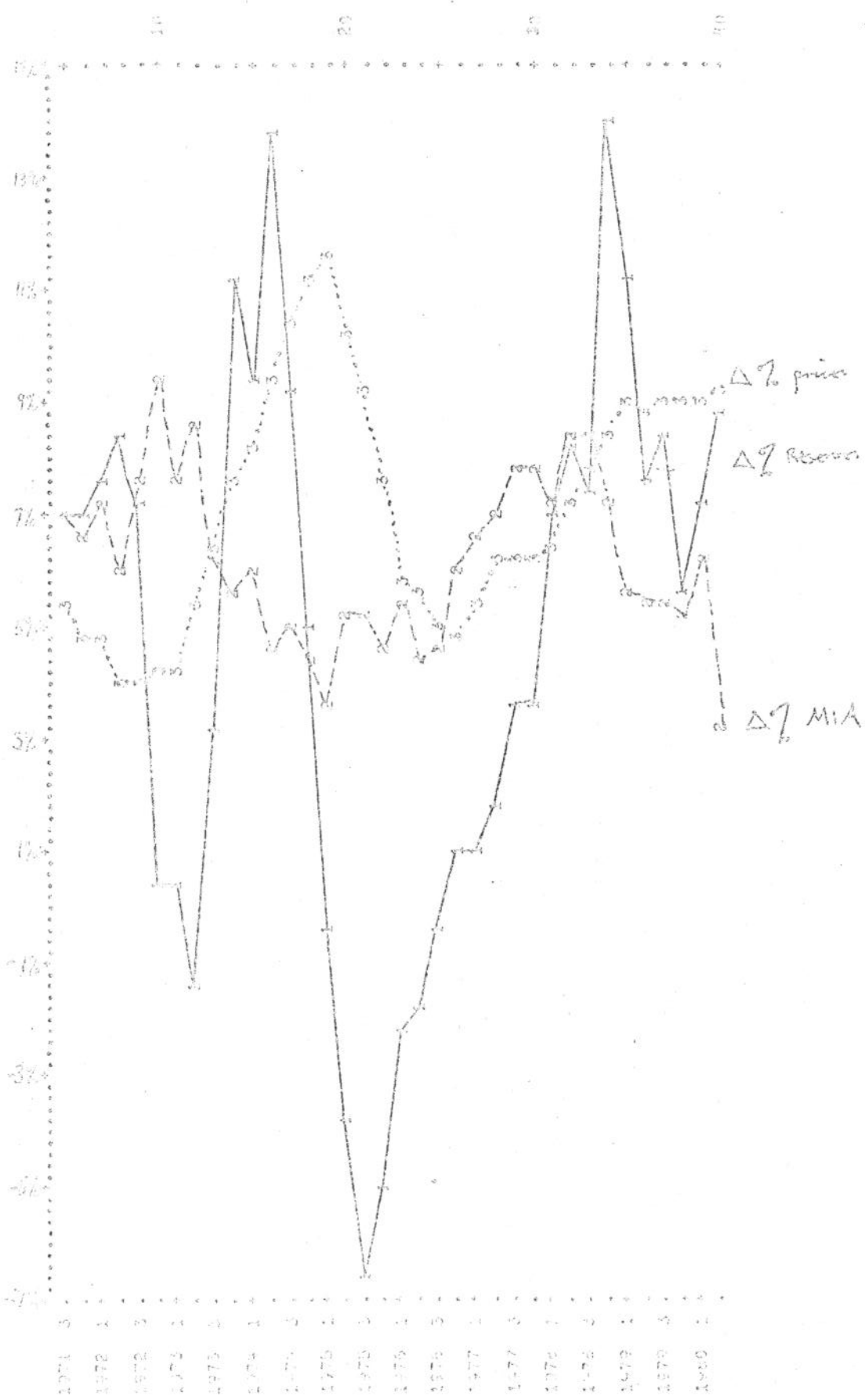
$\Delta^1 M1$

Reserve, MIA and / + percentage change on last quarter of previous year

115591 971013

INTERVAL 2.000-03

VARIABLE	MINIMUM	MEAN	MAXIMUM
1	-5.7385-02	4.4631-02	0.1301
2	5.0337-02	6.0644-02	9.2932-02
3	5.0354-02	7.6693-02	0.1156



MONETARY POLICY IN SWITZERLAND

1. The Swiss were early converts to monetary targets. The advent of floating exchange rates provided the opportunity for setting independent monetary objectives as part of a policy of ensuring price stability. Monetary targets were first set in 1975. These were expressed in terms of the annual average rate of growth of M1. In 1975 and 1976, a target for the growth in monetary base was published alongside the M1 target but it was dropped in 1977 and 1978. For the first 3 years, the outturn was quite close to the target, though there was a small overshoot in 1976 as a result of a shift from time deposits to sight deposits associated with lower interest rates on savings.
2. In 1978, however, the Swiss franc came under intense pressure despite very low interest rates and the introduction of a number of inflow controls. In effective terms the exchange rate appreciated by 20% between December 1977 and September 1978. In October 1978, the Swiss National Bank (SNB) announced a major change of policy. No further appreciation against the DM would be permitted and the SNB would intervene to achieve a rate of at least SF80 per DM100. (Germany accounts for about 1/5th of Swiss exports). This decision, which was related to the SNB's participation in the central bank arrangements to stabilise the dollar, implied the abandonment of the monetary target. During 1978 M1 rose by 22%, December to December, or 16% on average for the year, against a target of 5%.
3. No monetary target was set for 1979. During the course of the year monetary conditions gradually returned to "normal", and the exchange rate fell back from its peak. The excess of liquidity was gradually reabsorbed. M1 fell back from SF66 billion at the end of 1978 to SF62 billion by the middle of 1979 and it remained at that level for the rest of the year. By the end of the year, the SNB was able to unwind a number of measures aimed at discouraging capital inflows and in December the negative interest rate on foreign bank deposits was abolished.
4. At the end of 1979, the SNB decided once more to announce a monetary target. This was set at 4% for the period November to November 1980 and it was expressed in terms of the growth in the monetary base rather than M1. By mid 1980, the monetary base had

shown no increase over a year earlier and M1 had fallen about 8% below the level of a year earlier.

5. In response to the questionnaire sent by the Treasury and Civil Service Committee, the SNB reaffirmed its belief in the use of monetary targets but it was prepared to be pragmatic. Its memorandum stated:

"On the whole, we believe that the benefits exceed the costs of a money stock target. However, as far as the Swiss approach is concerned, we do not apply monetary targets in a rigid manner. Normally, we attempt to stick to the target as closely as we can, but are also prepared to depart from the target if major unforeseen events should occur. Even though our approach to targeting the money stock is not rigid, we do not consider it to be ineffective. An unforeseen event really must have a major detrimental impact on the Swiss economy if the money stock target is to be abandoned temporarily".

6. Prior to 1978, when the monetary target was expressed in terms of M1, there was thought to have been a fairly stable money multiplier ie the ratio between the monetary base and M1. Developments in 1978 and 1979 have called that into question. The SNB now believes that the demand for money is subject to shifts induced by exchange rate expectations. At times when the Swiss franc is expected to appreciate, investors alter the currency composition of their portfolios pushing up the demand for Swiss money and other Swiss franc assets.

7. With a target set in terms of M1 there was a danger of the authorities responding inappropriately if the money stock began to expand rapidly. The central bank would not know whether this was because monetary policy was too lax or because exchange rate expectations had changed. If it were wrongly interpreted as the former, the authorities would contract the monetary base and add to the deflationary pressures caused by the strong exchange rate.

8. To counter these problems, the SNB decided to set its target for 1980 only in terms of monetary base. In an interview last May, when the latest statistics for M1 were showing a fall of 12% on a year earlier, Dr Leutwiler, the SNB President, stated that the

decision to fix the target in terms of monetary base has been the correct one. If the target had been set for M1, it would have allowed the monetary base to expand too fast, further weakening the Swiss franc, ie the converse of para 7.

9. The SNB memorandum to the TCSC described the short run volatility of the money stock and the monetary base as "considerable", but this is not thought to weaken the impact of targets if public confidence that they will ultimately be met is retained. It warned that an attempt to eliminate the short run volatility of the monetary aggregates would be liable to increase interest rate and exchange rate volatility.

10. Irrespective of the aggregate for which the target has been set, monetary base has always been the instrument of control. There are several reasons for this stemming from features of the Swiss financial system. Swiss banks are normally willing to hold significant balances with the central bank even in the absence of monetary cash requirements. This reflects the fact that there is not a well developed domestic money market in Switzerland and that banks have thus no alternative source to the central bank for privacy liquidity. The absence of a money market, which makes it difficult to conduct open-market operations in short term domestic securities, rules out a strategy of monetary control based on short term interest rates as an instrument of policy.

11. The conduct of monetary policy has been aided by the small size of the public sector. In 1977 tax revenue was equivalent to 31.5% of GDP, compared with the OECD average of 36.2%, and the average for OECD Europe of 38%. The public sector deficits have also been small by international standards. Over the last 3 years the general government borrowing requirement has averaged around 1%.

12. It is dangerous to generalise from Swiss experience as it is an economy sui generis. Certainly, the experience of 1978 seems to have had little permanent effect on inflation which accelerated from 1% in 1978 to about 5% by December 1979. This was still the best performance in the OECD area. By June 1980 inflation had dropped to 3%.

13. By contrast, its growth performance has been the worst in the OECD area. Virtually alone among industrial countries, the level of

GNP in 1980 will still be below (2%) the 1973 level. This has, however, been consistent with the maintenance of an unemployment rate of less than $\frac{1}{2}$ %. The burden has fallen on foreign workers. Between 1974 and 1977 the total labour force contracted by 270,000 (10%) of which 210,000 was accounted for by foreign workers.

IG3 Division
HM Treasury
26 September 1980

SWISS MONETARY POLICY

1. This Annex examines the relationship between the monetary base and the monetary aggregates, principally M1 which the Swiss authorities used between 1975 and 1978 to express the monetary target. Chart 1 compares the percentage changes over four quarters for monetary base and M1. There appears to be quite a close relationship between the two, though this is not surprising since the base represents just over half of M1. Chart 2 shows the relationship for M2.

2. Divergences between the growth rates of the base and M1 are reflected in changes in the multiplier. Chart 3 shows the multiplier, defined as an elasticity, (the ratio of the absolute changes shows exactly the same profile). Over the 20 years to 1972, the multiplier was moderately stable, averaging about 1.0 (1.8 if measured as the ratio of the absolute changes). During this period there was one major aberration in 1959-60, and a less pronounced disturbance in 1962. Apart from these two periods, the multiplier fluctuated within a range of 0.1 to 3.6, 90% of the readings lying in the range 0.3 to 2.9. It is also noticeable that there is no trend in the multiplier.

3. Since 1972, there have been 3 major disturbances to the multiplier relationship, those in 1972-73 and 1978-79 being attributable to currency disturbances, in particular weakness of the US dollar against the DM. In 1975 there was a change in relative interest rates in Switzerland which caused a shift between M1 and M2. The M1 and M2 multipliers moved in opposite directions as opposed to many together in the periods of currency upheaval.

4. However the fact that, with hindsight, it has been possible to identify discrete events which have caused the deviations from the norm may be little comfort if it is not possible to predict either the timing of these events or the extent to which they will distort the picture. With the experience of 3 major deviations since 1972 it is difficult to rely on the stability of the multiplier.

5. Chart 4 shows the development of velocity, calculated on an annual basis. The velocity of the monetary base and M1 have shown wide variations, apparently around a rising trend. The velocity of M2 has moved cyclically with no trend.

6. Chart 5 shows the development of interest rates over the past 10 years. In the first half the period there were no public targets though control of the monetary aggregates was still exercised via the base. There appears to be little difference in the behaviour of interest rates since targets were adapted. Call money has exhibited great volatility, but three month rates have followed a smoother cyclical pattern, with peaks of around 6% being reached in 1974 and 1980, after the two oil shocks. There was a minor and short lived peak in 1977.

7. Chart 6 shows the development of prices and M1. Though the surges in M1 in 1972-73 and 1978-79 were followed, with differing lags, by periods of accelerating prices, it is possible that the relationship is coincidental, with a third factor - higher oil prices - being the explanatory variable. It is noticeable that the periods of accelerating monetary growth in 1968-69 and 1975-76 were not followed by peaks in the inflation rate.

IG3 Division
8 October 1980

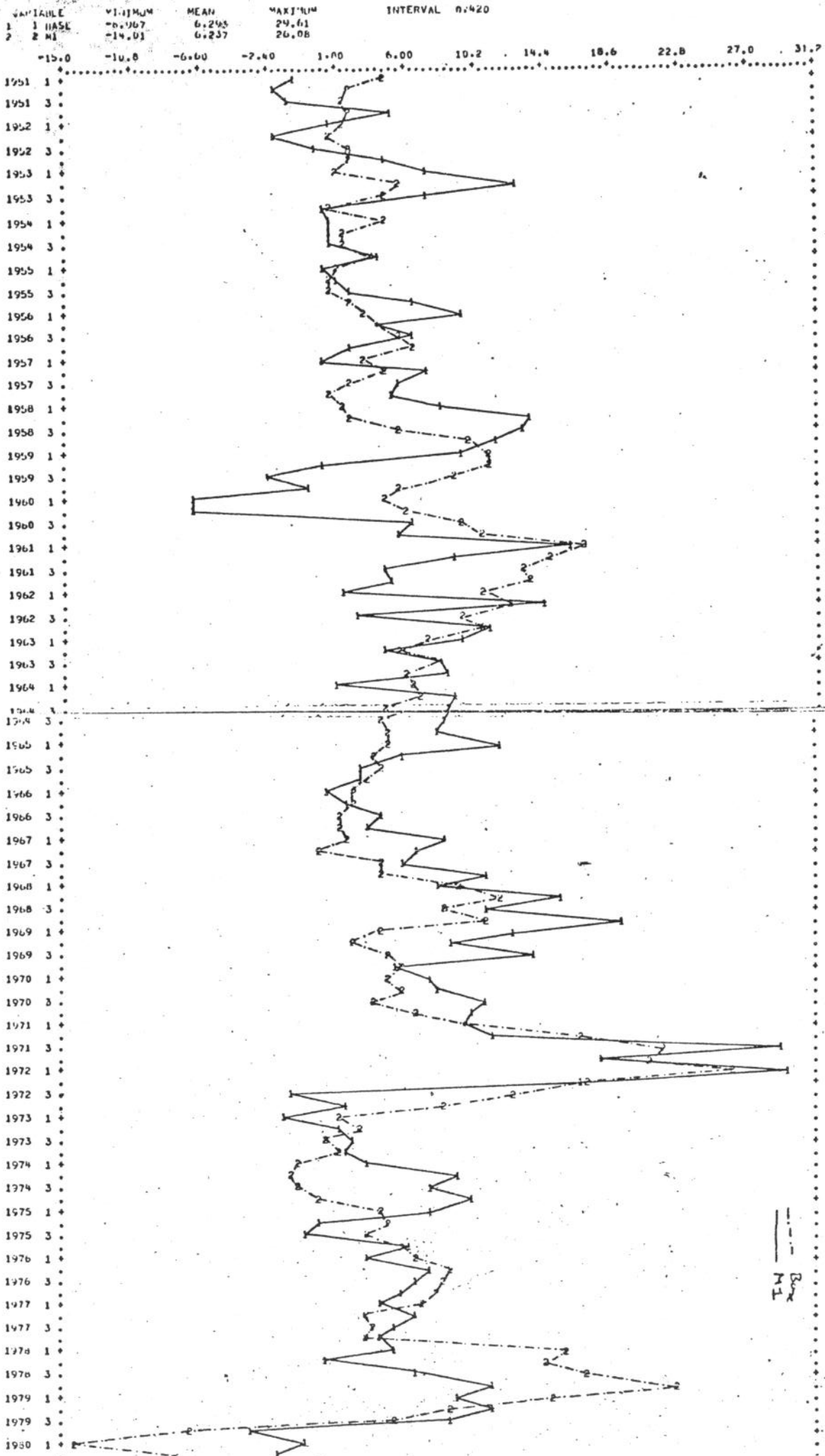


CHART 1. SWITZERLAND: Deviation of base and MI (percentage change on year ending)

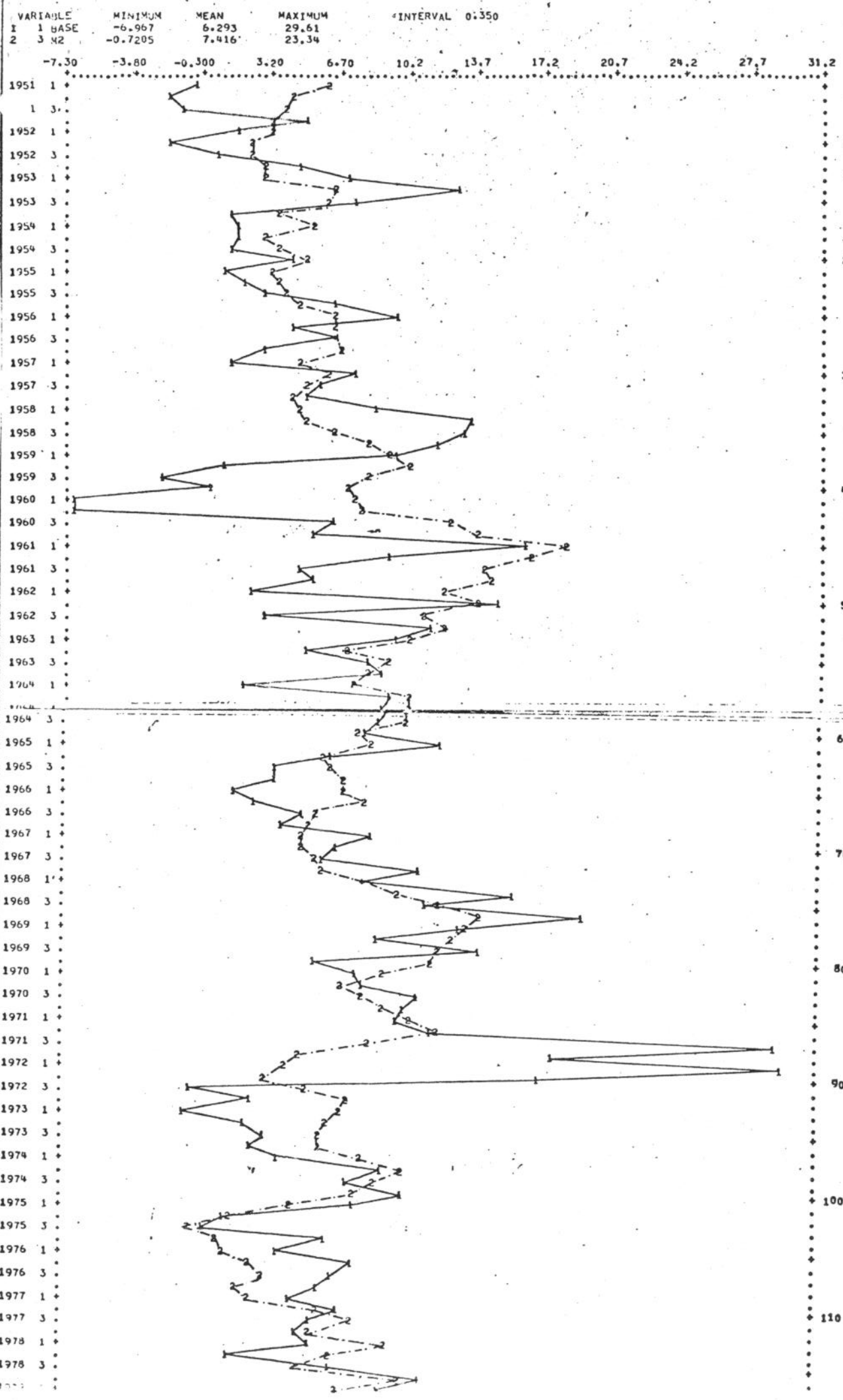
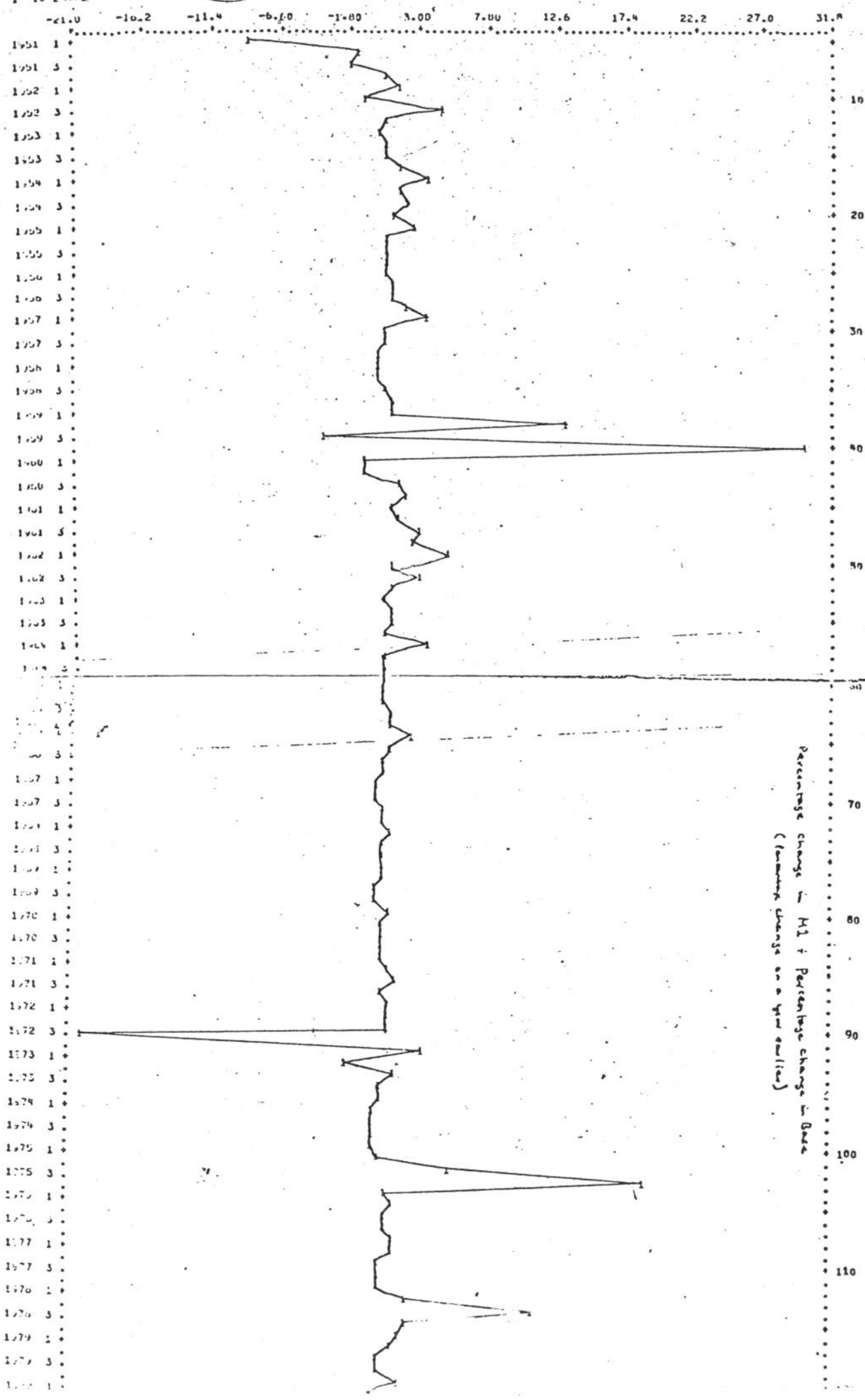


CHART 2 : SUITZELAND : DEVELOPMENT OF BME AND
(Passive) change in ocean level



Percentage change in M1 + Percentage change in Base
 (Percentage change in year omitted)

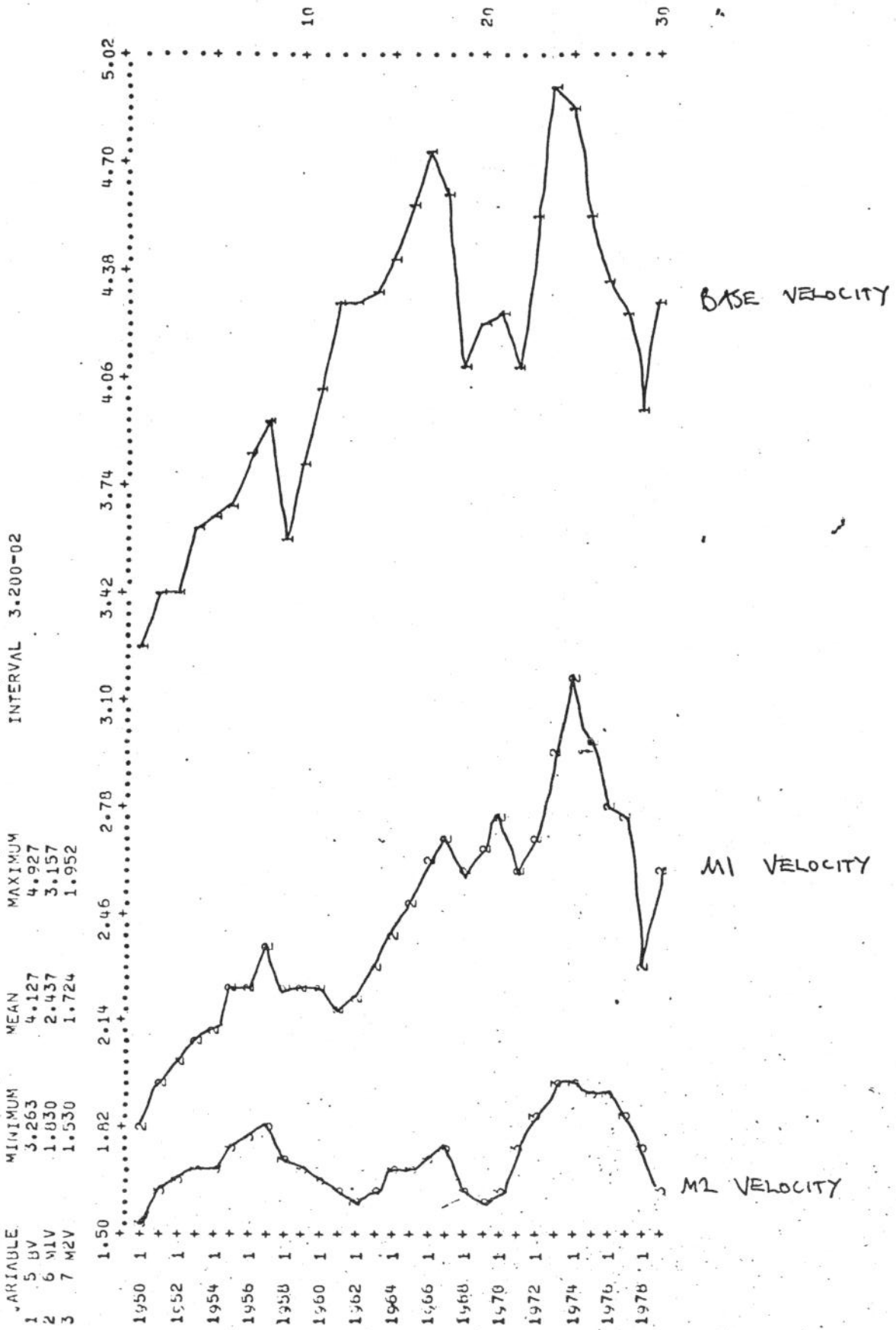
Substitution: Money Multiplier

Chart 3

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Switzerland: Velocity
(Annual data)

Chart 4



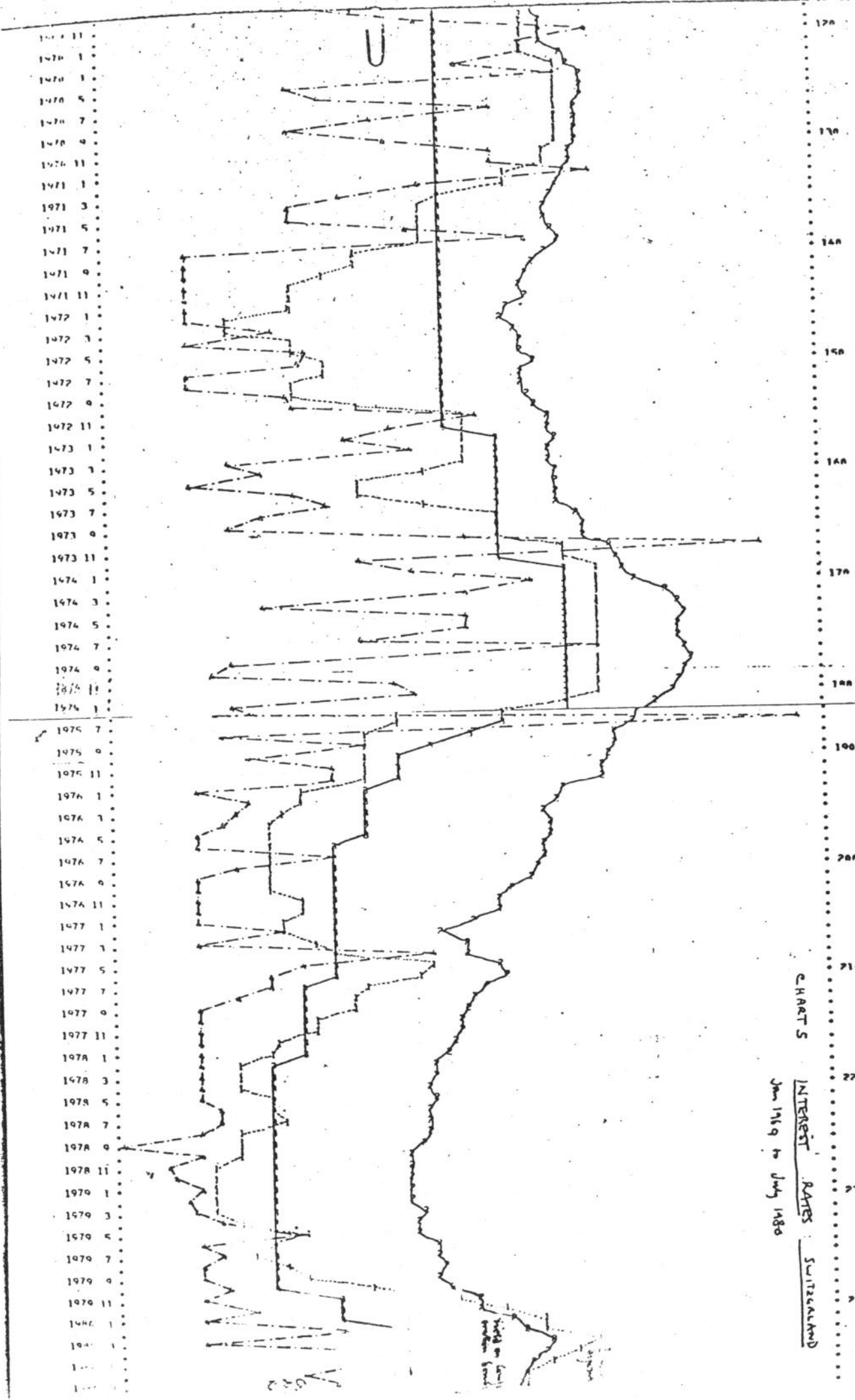
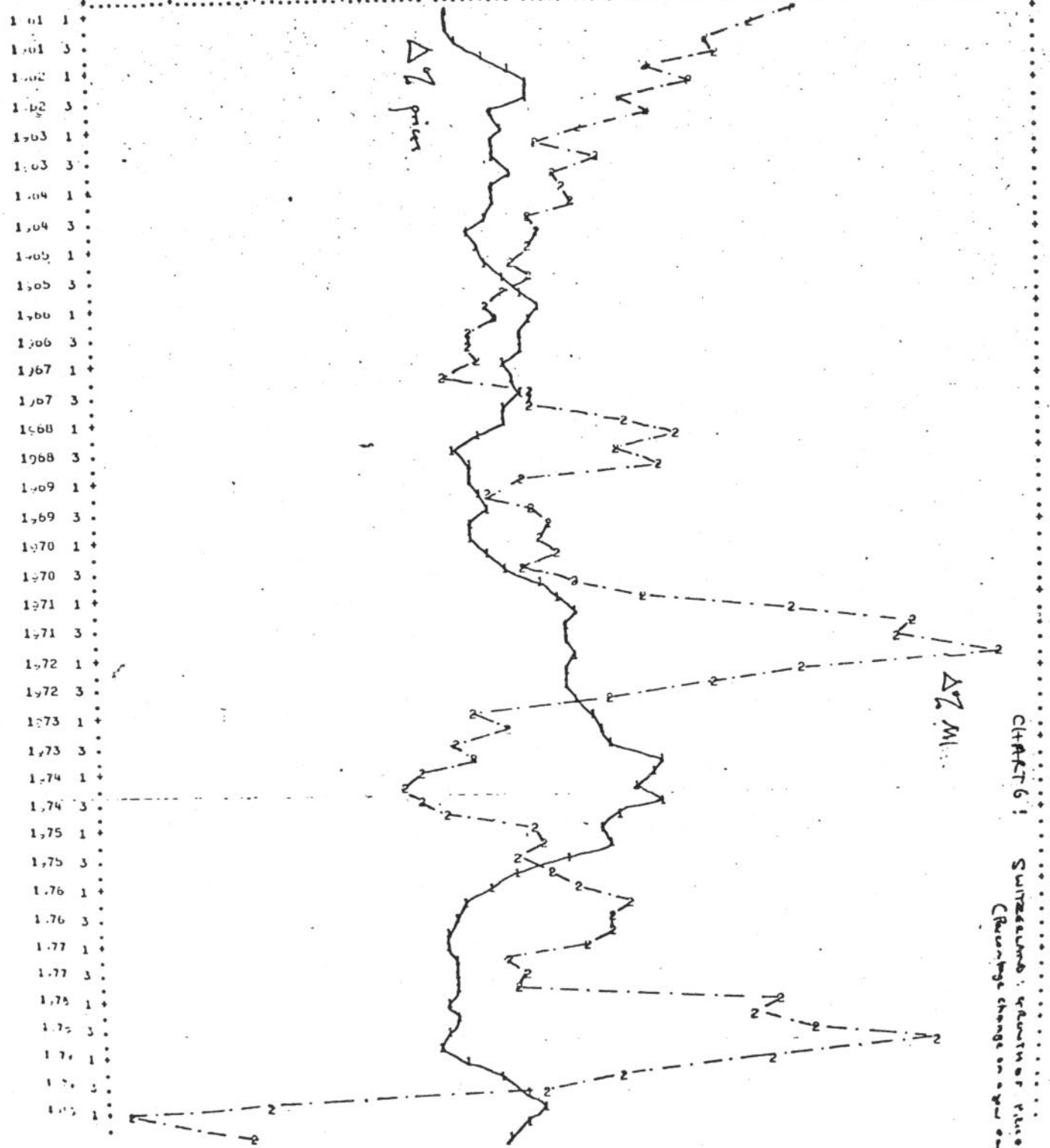


CHART 5
INTEREST RATES : SWITZERLAND

Jan 1959 to July 1980

1980

MINIMUM	MAXIMUM	INTERVAL
0.5797	4.105	0.590
-14.61	7.192	
	12.76	
	29.09	



1961 1 +
 1961 3 .
 1962 1 +
 1962 3 .
 1963 1 +
 1963 3 .
 1964 1 +
 1964 3 .
 1965 1 +
 1965 3 .
 1966 1 +
 1966 3 .
 1967 1 +
 1967 3 .
 1968 1 +
 1968 3 .
 1969 1 +
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 1976 1 +
 1976 3 .
 1977 1 +
 1977 3 .
 1978 1 +
 1978 3 .
 1979 1 +
 1979 3 .
 1980 1 +

CHART 6: SWITZERLAND: NUMBER OF RISES AND MONEY
 (Range change on a year basis)