

附錄 1：樣本期間初級資料與次級資料之計算程式

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option ps=500;
dm 'output;clear;log;clear;';
DATA CDATAL;
INPUT YEAR B CC K D DPPE DEEEE E DUM1 DUM2;
CARDS;
1969 8.443 19.16 3923.526 0.293 0.068150 -0.008117 40.000 0 0
1970 9.113 19.30 4020.775 0.310 0.057175 -0.006794 40.000 0 0
1971 9.303 18.75 4138.513 0.333 0.048468 -0.006794 40.000 0 0
1972 9.598 19.11 4268.184 0.342 0.051615 -0.006794 40.000 0 0
1973 9.137 47.27 4438.645 0.349 0.083571 -0.006794 38.258 0 0
1974 7.407 76.20 4687.592 0.346 0.161322 -0.052944 38.000 0 0
1975 7.521 86.37 4868.699 0.346 0.116156 -0.013941 38.000 0 0
1976 8.591 111.90 5070.971 0.356 0.096038 -0.006794 38.000 0 0
1977 10.622 170.10 5257.353 0.366 0.085498 -0.006794 38.000 0 0
1978 12.991 247.25 5484.316 0.368 0.077877 -0.006794 37.054 0 0
1979 12.110 289.86 5794.768 0.352 0.086964 -0.033175 36.048 0 0
1980 10.755 295.58 6135.574 0.330 0.111249 -0.035565 36.015 0 0
1981 15.040 201.65 6450.961 0.312 0.114178 -0.007764 36.849 0 0
1982 28.170 236.19 6693.784 0.280 0.088442 +0.017745 39.124 0 0
1983 35.675 187.30 6937.637 0.262 0.066060 0.058630 40.065 0 0
1984 38.055 126.90 7182.427 0.249 0.047648 0.018693 39.597 0 0
1985 49.998 60.80 7350.435 0.213 0.034172 -0.019173 39.849 1 0
1986 72.562 56.80 7515.391 0.177 0.033918 -0.000050 37.838 1 0
1987 111.687 60.20 7808.194 0.160 0.024529 -0.060273 31.740 1 0
1988 159.812 13.60 8208.168 0.146 0.020070 -0.177576 28.588 1 0
1989 165.187 127.70 8605.734 0.134 0.023738 -0.112030 26.407 1 0
1990 174.812 195.5 8976.157 0.133 0.028542 -0.087640 26.893 1 0
1991 285.062 247.3 9354.933 0.128 0.031774 -0.012709 26.815 1 1
1992 459.187 231.9 9817.929 0.120 0.034241 -0.009868 25.164 1 1
1993 593.250 257.4 10286.546 0.107 0.034493 -0.072040 26.387 1 1
1994 . 333.3 . . . 0.044708 26.457 1 1
;
TITLE 'DATA: CDATAL';
PROC PRINT;
RUN;

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DATA CDATA2;
INPUT F I IU KF P YU PF RU;
CARDS;
    0.361 0.082931 0.0667 0.03167 0.3006 2784.176 0.3446 0.016730
    0.480 0.080864 0.0735 0.00053 0.3109 2790.008 0.3621 0.022716
    0.617 0.087529 0.0616 0.02926 0.3203 2871.134 0.3820 0.006643
    0.952 0.087506 0.0621 0.05228 0.3390 3010.974 0.4007 0.013147
    1.026 0.093984 0.0684 0.00066 0.3899 3163.917 0.4264 -0.039288
    1.055 0.119878 0.0756 0 0.5162 3151.636 0.4626 -0.016040
    1.074 0.103780 0.0799 0 0.5274 3125.781 0.5070 -0.016079
    1.516 0.095827 0.0761 0.003 0.5559 3274.107 0.5397 0.011603
    1.345 0.092741 0.0742 0.007 0.5912 3427.646 0.5759 0.007126
    1.406 0.090401 0.0841 0.004 0.6227 3592.465 0.6215 -0.019975
    1.392 0.113196 0.0944 0.425 0.6943 3679.322 0.6764 -0.021084
    2.205 0.115177 0.1146 0.296 0.8068 3662.138 0.7395 0.020397
    7.235 0.091323 0.1391 0.06 0.9039 3721.942 0.8143 0.061108
    8.532 0.088561 0.1300 0.562 0.9352 3643.321 0.8645 0.130090
    11.859 0.106302 0.1111 0.416 0.9532 3785.410 0.8995 0.094666
    15.664 0.101071 0.1252 1.029 0.9619 4021.497 0.9393 0.069272
    22.556 0.077167 0.1062 1.117 0.9677 4145.236 0.9574 0.093294
    46.310 0.065225 0.0768 1.735 1.0000 4268.600 1.0000 -0.018161
    76.748 0.051011 0.0838 3.101 1.0049 4401.081 1.0315 -0.108861
    73.897 0.047284 0.0885 8.471 1.0157 4574.419 1.0713 -0.049391
    73.224 0.061988 0.0850 9.853 1.0476 4686.845 1.1203 -0.037030
    72.441 0.059086 0.0855 11.882 1.0906 4727.003 1.1682 0.061148
    82.405 0.049945 0.0786 6.275 1.1299 4674.430 1.2243 0.027677
    82.306 0.059794 0.0701 9.737 1.1745 4816.160 1.2600 -0.020630
    83.573 0.072506 0.0582 6.846 1.2156 4949.740 1.3215 0.057992
    90.295 . 0.0711 4.178 . 5177.801 1.3614 0.043560

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TITLE 'DATA: CDATA2';
PROC PRINT;
RUN;

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/*
DATA CDATA3;
INPUT DD GNC U;

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CARDS;

0.009375	.	0.018775
0.010919	.	0.016975
0.012472	104.310	0.016601
0.014276	116.407	0.014934
0.014385	116.723	0.012604
0.013000	108.625	0.015258
0.014306	130.881	0.024045
0.016545	144.211	0.017845
0.018452	159.117	0.017578
0.020726	175.278	0.016727
0.020538	205.185	0.012740
0.019641	234.831	0.012370
0.022488	249.113	0.013601
0.024193	270.290	0.021411
0.025944	280.940	0.027113
0.027917	294.003	0.024429
0.030391	333.721	0.029016
0.032309	347.188	0.026683
0.034357	356.171	0.019675
0.034968	398.672	0.016855
0.035279	457.896	0.015733
0.036810	495.323	0.016621
0.040071	512.088	0.015171
0.041909	583.980	0.015060
0.042912	681.635	0.014424
.	.	0.015637

;

*/

DATA CDATA3;

INPUT IM EX C L DKD GC Y YF;

CARDS;

161.965	146.128	386.458	4474	36.025	.	654.682	667.209
199.940	187.092	417.471	4654	42.840	.	729.125	741.716
243.969	249.391	455.772	4819	50.140	172.824	823.147	837.043
298.506	332.759	505.316	5022	59.081	181.310	932.769	946.910
373.221	413.235	565.103	5395	61.404	193.579	1052.467	1065.902
423.758	383.638	592.896	5575	57.701	175.887	1064.696	1081.193

395.927	388.742	632.289	5656	67.057	200.119	1117.169	1144.693
495.710	526.514	684.326	5772	80.551	220.443	1272.017	1295.129
522.963	593.861	736.126	6087	93.566	246.162	1401.631	1426.710
596.328	723.353	806.095	6333	108.961	263.449	1592.166	1619.251
703.974	766.717	891.969	6507	112.632	284.672	1722.309	1744.534
751.551	830.827	937.451	6629	113.816	307.153	1848.060	1871.207
764.119	905.744	974.879	6764	137.972	317.857	1961.950	1989.002
743.200	924.978	1027.579	6959	156.065	338.953	2031.623	2076.074
823.099	1079.089	1096.898	7266	173.665	354.925	2203.233	2264.634
935.057	1268.772	1200.546	7491	193.675	381.801	2436.766	2497.784
897.267	1299.732	1274.186	7651	218.291	405.930	2557.447	2633.871
1093.568	1658.744	1366.466	7945	237.485	422.882	2855.180	2933.453
1399.927	1973.012	1520.159	8183	258.216	458.995	3207.382	3271.754
1660.871	2084.916	1719.249	8247	273.038	502.046	3442.826	3501.850
1836.253	2199.711	1941.644	8390	289.585	557.390	3703.420	3762.617
1896.611	2223.096	2079.713	8423	325.017	629.622	3894.259	3960.079
2257.556	2473.056	2258.287	8569	366.575	673.852	4258.966	4324.574
2532.174	2605.145	2458.394	8765	400.418	703.209	4546.965	4616.489
2741.654	2792.046	2659.392	8874	430.663	772.937	4834.210	4904.959
			9081				

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;
TITLE 'DATA:  CDATE3';
PROC PRINT;
RUN;

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DATA CDATE4;
INPUT T1 T2 PT IE GK GWC  DGWK DGNK;
CARDS;

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0.015146	0.164470	.	0.16707	45.133	.	.	.
0.017489	0.144412	.	0.16837	62.122	.	.	.
0.020292	0.135146	58.110	0.16610	79.443	27.620	1.883	19.367
0.021992	0.125463	72.829	0.15800	97.925	30.819	2.385	20.754
0.026153	0.135333	96.168	0.25073	114.588	30.878	2.667	19.239
0.027385	0.091243	118.183	0.15000	138.147	28.736	2.839	26.519
0.029447	0.116146	141.218	0.10427	175.178	34.624	3.860	39.922
0.028886	0.105660	168.174	0.13630	221.030	38.151	5.040	48.581
0.030058	0.111244	198.196	0.14467	280.283	42.094	6.170	62.328
0.031756	0.114629	246.364	0.15607	329.663	46.368	6.449	53.223


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0.86366 0.59005 0.029131 0.38082
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0.86366 0.59005 0.029131 0.38082
;
TITLE 'DATA: CDATA5';
PROC PRINT;
RUN;

DATA C_DATA;
SET CDATA1;
SET CDATA2;
SET CDATA3;
SET CDATA4;
SET CDATA5;
RUN;

TITLE 'DATA: TOTAL C_DATA';
PROC PRINT;
RUN;

DATA CSERECO;
SET C_DATA;
M= CC+E * F ;
DPF=DIF(PF);
DPFP=DPF/LAG(PF);
DD=DKD/LAG(K);
DB=DIF(B);
DE=DIF(E);
DEE= DE/LAG(E);

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$DF = DIF(F);$
 $DI = DIF(I);$
 $DII = DI / LAG(I);$
 $DK = DIF(K);$
 $DKF = DIF(KF);$
 $DM = DIF(M);$
 $DMM = DM / LAG(M);$
 $DP = DIF(P);$
 $DPP = DP / LAG(P);$
 $DRU = DIF(RU);$
 $DRR = DRU / LAG(RU);$
 $DIF = I - IU;$
 $MP = M / P;$
 $BP = B / P;$
 $EKFP = E * KF / P;$
 $A = K + (E * KF + M + B) / P;$
 $DGK = DGWK + DGNK;$
 $GNC = GC - GWC;$
 $GN = DGNK + GNC;$
 $GW = DGWK + GWC;$
 $G = GN + GW;$
 $WP = AA * X * (L ** (X - 1)) * (K ** BB) * (GK ** RR);$
 $RK = AA * BB * (L ** X) * (K ** (BB - 1)) * (GK ** RR);$
 $R = I - DPPE;$
 $RIP = RK - IE + DPPE;$
 $W = WP * P;$
 $T = PT / P;$
 $TB = EX - IM;$
 $U = 1 - Y / YF;$
 $Q = (E * DF + E * DKF - P * EX + P * IM - E * IU * F$
 $- E * IU * KF + E * IU * D) / E;$
 $GS = (P * G + I * B + IU * E * D + E * DF) - (P * T + DM + IU * E * F$
 $+ DB);$
 $SD = Y - C - DK - GNC - GWC - DGNK - DGWK - EX + IM$
 $- DD * LAG(K);$
 $YF_R = AA * (L ** X) * (K ** BB) * (GK ** RR);$
 $T3 = (PT - T1 * (P * Y + I * B + IU * E * KF) - T2 * (P * IM)) / (P * C);$
 $YD = Y - T + (I * B + IU * E * KF) / P - (EKFP + MP + BP) * DPP - EKFP *$

```
      DRR - BP * DII - EKFP * DEE
PY=P * Y;
/*
GC=GNC+ GWC;
Y=C+DK+GNC+GWC+DGNK+DGWK+EX-IM+DKD;
YF=Y/(1-U);
*/
RUN;
TITLE 'DATA CSERECO: TOTAL TIME SERIES DATA';
PROC PRINT;
ID YEAR;
RUN;
```