

Model agregátní spotřební funkce

| pozorování | Skutečný čas | Spotřeba | Důchod |
|------------|--------------|----------|--------|
| | t | C_t | Y_t |
| 1 | 1993.03 | NaN | 294,50 |
| 2 | 1993.06 | NaN | 318,00 |
| 3 | 1993.09 | NaN | 338,40 |
| 4 | 1993.12 | NaN | 319,10 |
| 5 | 1994.03 | 146,08 | 302,15 |
| 6 | 1994.06 | 162,71 | 321,80 |
| 7 | 1994.09 | 170,13 | 345,30 |
| 8 | 1994.12 | 175,29 | 334,40 |
| 9 | 1995.03 | 151,51 | 319,90 |
| 10 | 1995.06 | 169,20 | 342,34 |
| 11 | 1995.09 | 182,04 | 367,92 |
| 12 | 1995.12 | 189,37 | 350,29 |
| 13 | 1996.03 | 163,32 | 332,98 |
| 14 | 1996.06 | 186,83 | 360,42 |
| 15 | 1996.09 | 195,87 | 382,63 |
| 16 | 1996.12 | 201,04 | 364,32 |
| 17 | 1997.03 | 173,78 | 333,93 |
| 18 | 1997.06 | 196,45 | 365,40 |
| 19 | 1997.09 | 190,63 | 366,53 |
| 20 | 1997.12 | 204,09 | 363,48 |
| 21 | 1998.03 | 176,07 | 340,79 |
| 22 | 1998.06 | 185,31 | 366,64 |
| 23 | 1998.09 | 191,84 | 356,02 |
| 24 | 1998.12 | 198,02 | 350,97 |
| 25 | 1999.03 | 179,66 | 336,91 |
| 26 | 1999.06 | 189,09 | 366,30 |
| 27 | 1999.09 | 195,29 | 360,57 |
| 28 | 1999.12 | 201,61 | 357,26 |
| 29 | 2000.03 | 183,47 | 348,06 |
| 30 | 2000.06 | 193,22 | 377,57 |
| 31 | 2000.09 | 201,35 | 370,54 |
| 32 | 2000.12 | 205,41 | 371,13 |
| 33 | 2001.03 | 189,15 | 360,55 |
| 34 | 2001.06 | 200,98 | 390,67 |
| 35 | 2001.09 | 209,43 | 382,75 |
| 36 | 2001.12 | 214,17 | 381,12 |
| 37 | 2002.03 | 196,89 | 370,49 |
| 38 | 2002.06 | 208,21 | 400,46 |

C_t ... reálné výdaje domácností na konečnou spotřebu
 Y_t ... reálný hrubý domácí produkt v mld. Kč

spotřebu v mld. Kč, ceny roku 1995
, základ cen rok 1995

Jednoduchý lineární keynesiánský model

Model

$$C_t = b_0 + b_1 \cdot Y_t$$

| 0 | C_t | Y_t |
|----|---------|---------|
| 1 | NaN | 294,5 |
| 2 | NaN | 318 |
| 3 | NaN | 338,4 |
| 4 | NaN | 319,1 |
| 5 | 146,08 | 302,15 |
| 6 | 162,71 | 321,8 |
| 7 | 170,13 | 345,3 |
| 8 | 175,29 | 334,4 |
| 9 | 151,51 | 319,9 |
| 10 | 169,2 | 342,34 |
| 11 | 182,04 | 367,92 |
| 12 | 189,37 | 350,29 |
| 13 | 163,32 | 332,98 |
| 14 | 186,83 | 360,42 |
| 15 | 195,87 | 382,63 |
| 16 | 201,04 | 364,32 |
| 17 | 173,78 | 333,93 |
| 18 | 196,45 | 365,4 |
| 19 | 190,63 | 366,53 |
| 20 | 204,09 | 363,48 |
| 21 | 176,073 | 340,788 |
| 22 | 185,308 | 366,644 |
| 23 | 191,837 | 356,02 |
| 24 | 198,017 | 350,97 |
| 25 | 179,656 | 336,911 |
| 26 | 189,085 | 366,304 |
| 27 | 195,291 | 360,571 |
| 28 | 201,606 | 357,257 |
| 29 | 183,469 | 348,056 |
| 30 | 193,222 | 377,568 |
| 31 | 201,35 | 370,535 |
| 32 | 205,413 | 371,126 |
| 33 | 189,15 | 360,549 |
| 34 | 200,98 | 390,665 |
| 35 | 209,43 | 382,746 |
| 36 | 214,166 | 381,116 |
| 37 | 196,889 | 370,493 |
| 38 | 208,21 | 400,455 |

| Odhad parametrů | | |
|-----------------|-----------|-----------|
| | b_1 | b_0 |
| b_i | 0,6809 | -55,6021 |
| sb_i | 0,0640 | 22,9093 |
| R^2, s | 0,7794 | 7,8240 |
| FR, n-k-1 | 113,0595 | 32,0000 |
| | 6920,9475 | 1958,8822 |
| $ b_i /sb_i$ | 10,6329 | 2,4271 |

| alfa |
|------|
| 0,05 |

| n |
|----|
| 34 |

Model je statisticky významný, protože FR (113,0595) je větší než kritická hodnota. Parametry jsou také statisticky významné, protože obě $|b_i|/sb_i$ jsou větší než kritická hodnota.

*

Ověření splnění podmínek lineární regrese

| t | y_t | e | e^2 | e^3 | e^4 | $e_t - e_{t-1}$ |
|----|----------|----------|----------|------------|------------|-----------------|
| 5 | 150,1341 | -4,0541 | 16,4359 | -66,6329 | 270,1374 | 3,2502 |
| 6 | 163,5139 | -0,8039 | 0,6463 | -0,5196 | 0,4177 | -8,5813 |
| 7 | 179,5153 | -9,3853 | 88,0834 | -826,6867 | 7758,6817 | 12,5819 |
| 8 | 172,0934 | 3,1966 | 10,2184 | 32,6642 | 104,4149 | -13,9068 |
| 9 | 162,2202 | -10,7102 | 114,7089 | -1228,5581 | 13158,1322 | 2,4104 |
| 10 | 177,4998 | -8,2998 | 68,8865 | -571,7433 | 4745,3482 | -4,5776 |
| 11 | 194,9174 | -12,8774 | 165,8275 | -2135,4272 | 27498,7552 | 19,3344 |
| 12 | 182,913 | 6,4570 | 41,6928 | 269,2104 | 1738,2904 | -14,2635 |
| 13 | 171,1265 | -7,8065 | 60,9414 | -475,7383 | 3713,8484 | 4,8259 |
| 14 | 189,8106 | -2,9806 | 8,8840 | -26,4795 | 78,9246 | -6,0830 |
| 15 | 204,9336 | -9,0636 | 82,1480 | -744,5523 | 6748,2881 | 17,6374 |
| 16 | 192,4661 | 8,5739 | 73,5112 | 630,2747 | 5403,8904 | -6,5672 |
| 17 | 171,7734 | 2,0066 | 4,0266 | 8,0800 | 16,2137 | 1,2418 |
| 18 | 193,2015 | 3,2485 | 10,5527 | 34,2801 | 111,3585 | -6,5894 |
| 19 | 193,9709 | -3,3409 | 11,1619 | -37,2912 | 124,5877 | 15,5368 |
| 20 | 191,8942 | 12,1958 | 148,7382 | 1813,9854 | 22123,0519 | -12,5658 |
| 21 | 176,443 | -0,3700 | 0,1369 | -0,0507 | 0,0187 | -8,3705 |
| 22 | 194,0486 | -8,7406 | 76,3975 | -667,7569 | 5836,5723 | 13,7630 |
| 23 | 186,8146 | 5,0224 | 25,2245 | 126,6873 | 636,2740 | 9,6186 |
| 24 | 183,376 | 14,6410 | 214,3583 | 3138,4155 | 45949,4776 | -8,7881 |
| 25 | 173,8031 | 5,8529 | 34,2560 | 200,4952 | 1173,4702 | -10,5849 |
| 26 | 193,8171 | -4,7321 | 22,3924 | -105,9618 | 501,4174 | 10,1096 |
| 27 | 189,9134 | 5,3776 | 28,9184 | 155,5114 | 836,2763 | 8,5715 |
| 28 | 187,6569 | 13,9491 | 194,5778 | 2714,1879 | 37860,5182 | -11,8720 |
| 29 | 181,3919 | 2,0771 | 4,3145 | 8,9619 | 18,6152 | -10,3419 |
| 30 | 201,4868 | -8,2648 | 68,3069 | -564,5426 | 4665,8300 | 12,9168 |
| 31 | 196,698 | 4,6520 | 21,6413 | 100,6760 | 468,3473 | 3,6606 |
| 32 | 197,1004 | 8,3126 | 69,0995 | 574,3967 | 4774,7352 | -9,0610 |
| 33 | 189,8984 | -0,7484 | 0,5602 | -0,4192 | 0,3138 | -8,6762 |
| 34 | 210,4046 | -9,4246 | 88,8239 | -837,1336 | 7889,6850 | 13,8421 |
| 35 | 205,0125 | 4,4175 | 19,5140 | 86,2023 | 380,7955 | 5,8459 |
| 36 | 203,9027 | 10,2633 | 105,3362 | 1081,1015 | 11095,7150 | -10,0437 |
| 37 | 196,6694 | 0,2196 | 0,0482 | 0,0106 | 0,0023 | -9,0804 |
| 38 | 217,0707 | -8,8607 | 78,5125 | -695,6778 | 6164,2115 | |
| | 6377,492 | 0 | součty | 1958,882 | 1989,96956 | 221846,616 |

Test normality rezidui

| | | | |
|----|----------|--------|---------|
| A3 | 0,08588 | var A3 | 0,14826 |
| A4 | -1,03431 | var A4 | 0,45793 |

| | |
|-----------|---------|
| norm test | 1,95996 |
|-----------|---------|

| | |
|---------|---------|
| test A3 | 0,22304 |
| test A4 | 7,33804 |

Test autokorelace rezidui

Durbin-Watsonův

| | |
|----|---------|
| DW | 1,84303 |
|----|---------|

Test homoskedasticity rezidui

Goldfeld-Quandtův

| t | C_t | Y_t | e_t | e_t^2 |
|---|--------|--------|----------|----------|
| 5 | 146,08 | 302,15 | -4,0541 | 16,4359 |
| 9 | 151,51 | 319,9 | -10,7102 | 114,7089 |
| 6 | 162,71 | 321,8 | -0,8039 | 0,6463 |

| | |
|----|----------|
| S1 | 683,9303 |
| S2 | 819,7623 |
| T= | |

| | | | | |
|----|---------|---------|----------|----------|
| 13 | 163,32 | 332,98 | -7,8065 | 60,9414 |
| 17 | 173,78 | 333,93 | 2,0066 | 4,0266 |
| 8 | 175,29 | 334,4 | 3,1966 | 10,2184 |
| 25 | 179,656 | 336,911 | 5,8529 | 34,2560 |
| 21 | 176,073 | 340,788 | -0,3700 | 0,1369 |
| 10 | 169,2 | 342,34 | -8,2998 | 68,8865 |
| 7 | 170,13 | 345,3 | -9,3853 | 88,0834 |
| 29 | 183,469 | 348,056 | 2,0771 | 4,3145 |
| 12 | 189,37 | 350,29 | 6,4570 | 41,6928 |
| 24 | 198,017 | 350,97 | 14,6410 | 214,3583 |
| 23 | 191,837 | 356,02 | 5,0224 | 25,2245 |
| 28 | 201,606 | 357,257 | 13,9491 | 194,5778 |
| 14 | 186,83 | 360,42 | -2,9806 | 8,8840 |
| 33 | 189,15 | 360,549 | -0,7484 | 0,5602 |
| 27 | 195,291 | 360,571 | 5,3776 | 28,9184 |
| 20 | 204,09 | 363,48 | 12,1958 | 148,7382 |
| 16 | 201,04 | 364,32 | 8,5739 | 73,5112 |
| 18 | 196,45 | 365,4 | 3,2485 | 10,5527 |
| 26 | 189,085 | 366,304 | -4,7321 | 22,3924 |
| 19 | 190,63 | 366,53 | -3,3409 | 11,1619 |
| 22 | 185,308 | 366,644 | -8,7406 | 76,3975 |
| 11 | 182,04 | 367,92 | -12,8774 | 165,8275 |
| 37 | 196,889 | 370,493 | 0,2196 | 0,0482 |
| 31 | 201,35 | 370,535 | 4,6520 | 21,6413 |
| 32 | 205,413 | 371,126 | 8,3126 | 69,0995 |
| 30 | 193,222 | 377,568 | -8,2648 | 68,3069 |
| 36 | 214,166 | 381,116 | 10,2633 | 105,3362 |
| 15 | 195,87 | 382,63 | -9,0636 | 82,1480 |
| 35 | 209,43 | 382,746 | 4,4175 | 19,5140 |
| 34 | 200,98 | 390,665 | -9,4246 | 88,8239 |
| 38 | 208,21 | 400,455 | -8,8607 | 78,5125 |

| | |
|--------|---|
| | T2= |
| F21 | 1,19861 |
| | $2*(k+1)=$ |
| | d.f.= |
| F test | 2,68664 |
| | F-rozdělení s $(T-T_2-2(k+1))/2$ a $(T-T_2-2(k+1))$ |

Test nezamítá nulovou hypotézu homoskedasticity
Hodnota F21 nepřevyšuje kritickou hodnotu testu

Razeno vzestupně podle hodnot proměnné Y_t

Vynechávají 6 prostředních pozorování
Vynechávají 6 prostředních pozorování
Vynechávají 6 prostředních pozorování
Vynechávají 6 prostředních pozorování
Vynechávají 6 prostředních pozorování
Vynechávají 6 prostředních pozorování

odel agregátní spotřební funkce

| t-test | FR-test |
|--------|---------|
| 2,0369 | 4,1491 |

ež FR-test (4,1491).
ou větší než hodnota t-testu (2,0369).

| $(e_t - e_{t-1})^2$ |
|---------------------|
| 10,5636 |
| 73,6392 |
| 158,3040 |
| 193,4002 |
| 5,8102 |
| 20,9545 |
| 373,8190 |
| 203,4472 |
| 23,2893 |
| 37,0023 |
| 311,0785 |
| 43,1284 |
| 1,5422 |
| 43,4205 |
| 241,3912 |
| 157,9005 |
| 70,0660 |
| 189,4191 |
| 92,5171 |
| 77,2311 |
| 112,0404 |
| 102,2049 |
| 73,4711 |
| 140,9437 |
| 106,9558 |
| 166,8443 |
| 13,3999 |
| 82,1025 |
| 75,2766 |
| 191,6039 |
| 34,1743 |
| 100,8763 |
| 82,4528 |
| 3610,2704 |

6
4
12

$(k+1)/2$ stupni volnosti

city
tu 2,68664

Jednoduchý lineární keynesiánský m

Model

$$C_t = b_0 + b_1 \cdot Y_t + b_2 \cdot Y_{t-4}$$

| 0 | C_t | Y_t | Y_{t-4} |
|----|---------|---------|-----------|
| 1 | NaN | 294,5 | NaN |
| 2 | NaN | 318 | NaN |
| 3 | NaN | 338,4 | NaN |
| 4 | NaN | 319,1 | NaN |
| 5 | 146,08 | 302,15 | 294,5 |
| 6 | 162,71 | 321,8 | 318 |
| 7 | 170,13 | 345,3 | 338,4 |
| 8 | 175,29 | 334,4 | 319,1 |
| 9 | 151,51 | 319,9 | 302,15 |
| 10 | 169,2 | 342,34 | 321,8 |
| 11 | 182,04 | 367,92 | 345,3 |
| 12 | 189,37 | 350,29 | 334,4 |
| 13 | 163,32 | 332,98 | 319,9 |
| 14 | 186,83 | 360,42 | 342,34 |
| 15 | 195,87 | 382,63 | 367,92 |
| 16 | 201,04 | 364,32 | 350,29 |
| 17 | 173,78 | 333,93 | 332,98 |
| 18 | 196,45 | 365,4 | 360,42 |
| 19 | 190,63 | 366,53 | 382,63 |
| 20 | 204,09 | 363,48 | 364,32 |
| 21 | 176,073 | 340,788 | 333,93 |
| 22 | 185,308 | 366,644 | 365,4 |
| 23 | 191,837 | 356,02 | 366,53 |
| 24 | 198,017 | 350,97 | 363,48 |
| 25 | 179,656 | 336,911 | 340,788 |
| 26 | 189,085 | 366,304 | 366,644 |
| 27 | 195,291 | 360,571 | 356,02 |
| 28 | 201,606 | 357,257 | 350,97 |
| 29 | 183,469 | 348,056 | 336,911 |
| 30 | 193,222 | 377,568 | 366,304 |
| 31 | 201,35 | 370,535 | 360,571 |
| 32 | 205,413 | 371,126 | 357,257 |
| 33 | 189,15 | 360,549 | 348,056 |
| 34 | 200,98 | 390,665 | 377,568 |
| 35 | 209,43 | 382,746 | 370,535 |
| 36 | 214,166 | 381,116 | 371,126 |
| 37 | 196,889 | 370,493 | 360,549 |
| 38 | 208,21 | 400,455 | 390,665 |

Odhady regresních parametrů

| | b_2 | b_1 | b_0 |
|-----------|-----------|-----------|----------|
| bi | 0,3107 | 0,3785 | -56,1243 |
| sbi | 0,1429 | 0,1518 | 21,6832 |
| R^2, s | 0,8086 | 7,4048 | #N/A |
| FR, n-k-1 | 65,4747 | 31,0000 | #N/A |
| | 7180,0713 | 1699,7584 | #N/A |
| bi /sbi | 2,1739 | 2,4939 | 2,5884 |

Model je statisticky významný, protože hodnota F
Parametry jsou také statisticky významné, protože

Ověření splnění podmínek lineární regrese

| t | y_v | e | e^2 | e^3 | e^4 |
|---|-------|---|-------|-------|-------|
|---|-------|---|-------|-------|-------|

| | | | | | |
|--------|----------|----------|-----------|------------|------------|
| 5 | 149,7242 | -3,6442 | 13,2803 | -48,3961 | 176,3656 |
| 6 | 164,4621 | -1,7521 | 3,0697 | -5,3783 | 9,4231 |
| 7 | 179,6938 | -9,5638 | 91,4671 | -874,7764 | 8366,2229 |
| 8 | 169,5724 | 5,7176 | 32,6910 | 186,9143 | 1068,7022 |
| 9 | 158,8186 | -7,3086 | 53,4157 | -390,3948 | 2853,2422 |
| 10 | 173,4162 | -4,2162 | 17,7764 | -74,9493 | 316,0020 |
| 11 | 190,3983 | -8,3583 | 69,8615 | -583,9248 | 4880,6303 |
| 12 | 180,3396 | 9,0304 | 81,5480 | 736,4104 | 6650,0750 |
| 13 | 169,2835 | -5,9635 | 35,5637 | -212,0853 | 1264,7775 |
| 14 | 186,6402 | 0,1898 | 0,0360 | 0,0068 | 0,0013 |
| 15 | 202,9932 | -7,1232 | 50,7396 | -361,4270 | 2574,5069 |
| 16 | 190,5862 | 10,4538 | 109,2821 | 1142,4144 | 11942,5823 |
| 17 | 173,7068 | 0,0732 | 0,0054 | 0,0004 | 0,0000 |
| 18 | 194,1422 | 2,3078 | 5,3260 | 12,2916 | 28,3667 |
| 19 | 201,4702 | -10,8402 | 117,5094 | -1273,8227 | 13808,4620 |
| 20 | 194,6272 | 9,4628 | 89,5444 | 847,3392 | 8018,1912 |
| 21 | 176,5975 | -0,5245 | 0,2751 | -0,1443 | 0,0757 |
| 22 | 196,1602 | -10,8522 | 117,7702 | -1278,0654 | 13869,8188 |
| 23 | 192,4905 | -0,6535 | 0,4271 | -0,2791 | 0,1824 |
| 24 | 189,6317 | 8,3853 | 70,3130 | 589,5950 | 4943,9235 |
| 25 | 177,2609 | 2,3951 | 5,7367 | 13,7401 | 32,9093 |
| 26 | 196,4180 | -7,3330 | 53,7731 | -394,3190 | 2891,5476 |
| 27 | 190,9476 | 4,3434 | 18,8653 | 81,9399 | 355,8996 |
| 28 | 188,1244 | 13,4816 | 181,7535 | 2450,3278 | 33034,3367 |
| 29 | 180,2743 | 3,1947 | 10,2063 | 32,6066 | 104,1695 |
| 30 | 200,5753 | -7,3533 | 54,0717 | -397,6077 | 2923,7465 |
| 31 | 196,1325 | 5,2175 | 27,2225 | 142,0341 | 741,0662 |
| 32 | 195,3265 | 10,0865 | 101,7368 | 1026,1648 | 10350,3764 |
| 33 | 188,4649 | 0,6851 | 0,4693 | 0,3215 | 0,2202 |
| 34 | 209,0316 | -8,0516 | 64,8281 | -521,9697 | 4202,6869 |
| 35 | 203,8495 | 5,5805 | 31,1418 | 173,7861 | 969,8098 |
| 36 | 203,4162 | 10,7498 | 115,5572 | 1242,2115 | 13353,4681 |
| 37 | 196,1097 | 0,7793 | 0,6072 | 0,4732 | 0,3687 |
| 38 | 216,8058 | -8,5958 | 73,8871 | -635,1163 | 5459,3092 |
| součty | | | 1699,7584 | 1625,9216 | 155191,466 |

Test normality reziduí

| | |
|----|---------|
| A3 | 0,0868 |
| A4 | -1,1737 |

| | |
|--------|--------|
| var A3 | 0,1483 |
| var A4 | 0,4579 |

| | |
|-----------|--------|
| norm test | 1,9600 |
|-----------|--------|

| | |
|---------|--|
| test A3 | |
| test A4 | |

Test autokorelace reziduí Durbin-Watsonův

| | |
|----|--------|
| DW | 2,2507 |
|----|--------|

Test homoskedasticity reziduí Goldfeld-Quandtův

| t | C _t | Y _t | Y _{t-4} | e _t | e _t ² | y _v | C _t původní | |
|----|----------------|----------------|------------------|----------------|-----------------------------|----------------|------------------------|----|
| 5 | 146,08 | 302,15 | 294,5 | -3,6442 | 13,2803 | 149,7242 | 149,7242 | S1 |
| 9 | 151,51 | 319,9 | 302,15 | -7,3086 | 53,4157 | 158,8186 | 164,4621 | |
| 6 | 162,71 | 321,8 | 318 | -1,7521 | 3,0697 | 164,4621 | 179,6938 | S2 |
| 13 | 163,32 | 332,98 | 319,9 | -5,9635 | 35,5637 | 169,2835 | 169,5724 | |

| | | | | | | | | |
|----|---------|---------|---------|----------|----------|----------|----------|---------------|
| 17 | 173,78 | 333,93 | 332,98 | 0,0732 | 0,0054 | 173,7068 | 158,8186 | F21 |
| 8 | 175,29 | 334,4 | 319,1 | 5,7176 | 32,6910 | 169,5724 | 173,4162 | |
| 25 | 179,656 | 336,911 | 340,788 | 2,3951 | 5,7367 | 177,2609 | 190,3983 | F test |
| 21 | 176,073 | 340,788 | 333,93 | -0,5245 | 0,2751 | 176,5975 | 180,3396 | F-rozdělení s |
| 10 | 169,2 | 342,34 | 321,8 | -4,2162 | 17,7764 | 173,4162 | 169,2835 | |
| 7 | 170,13 | 345,3 | 338,4 | -9,5638 | 91,4671 | 179,6938 | 186,6402 | |
| 29 | 183,469 | 348,056 | 336,911 | 3,1947 | 10,2063 | 180,2743 | 202,9932 | |
| 12 | 189,37 | 350,29 | 334,4 | 9,0304 | 81,5480 | 180,3396 | 190,5862 | |
| 24 | 198,017 | 350,97 | 363,48 | 8,3853 | 70,3130 | 189,6317 | 173,7068 | |
| 23 | 191,837 | 356,02 | 366,53 | -0,6535 | 0,4271 | 192,4905 | 194,1422 | |
| 28 | 201,606 | 357,257 | 350,97 | 13,4816 | 181,7535 | 188,1244 | 201,4702 | Vynechávání |
| 14 | 186,83 | 360,42 | 342,34 | 0,1898 | 0,0360 | 186,6402 | 194,6272 | Vynechávání |
| 33 | 189,15 | 360,549 | 348,056 | 0,6851 | 0,4693 | 188,4649 | 176,5975 | Vynechávání |
| 27 | 195,291 | 360,571 | 356,02 | 4,3434 | 18,8653 | 190,9476 | 196,1602 | Vynechávání |
| 20 | 204,09 | 363,48 | 364,32 | 9,4628 | 89,5444 | 194,6272 | 192,4905 | Vynechávání |
| 16 | 201,04 | 364,32 | 350,29 | 10,4538 | 109,2821 | 190,5862 | 189,6317 | Vynechávání |
| 18 | 196,45 | 365,4 | 360,42 | 2,3078 | 5,3260 | 194,1422 | 177,2609 | |
| 26 | 189,085 | 366,304 | 366,644 | -7,3330 | 53,7731 | 196,4180 | 196,4180 | |
| 19 | 190,63 | 366,53 | 382,63 | -10,8402 | 117,5094 | 201,4702 | 190,9476 | |
| 22 | 185,308 | 366,644 | 365,4 | -10,8522 | 117,7702 | 196,1602 | 188,1244 | |
| 11 | 182,04 | 367,92 | 345,3 | -8,3583 | 69,8615 | 190,3983 | 180,2743 | |
| 37 | 196,889 | 370,493 | 360,549 | 0,7793 | 0,6072 | 196,1097 | 200,5753 | |
| 31 | 201,35 | 370,535 | 360,571 | 5,2175 | 27,2225 | 196,1325 | 196,1325 | |
| 32 | 205,413 | 371,126 | 357,257 | 10,0865 | 101,7368 | 195,3265 | 195,3265 | |
| 30 | 193,222 | 377,568 | 366,304 | -7,3533 | 5,0000 | 200,5753 | 188,4649 | |
| 36 | 214,166 | 381,116 | 371,126 | 10,7498 | 6,0000 | 203,4162 | 209,0316 | |
| 15 | 195,87 | 382,63 | 367,92 | -7,1232 | 50,7396 | 202,9932 | 203,8495 | |
| 35 | 209,43 | 382,746 | 370,535 | 5,5805 | 31,1418 | 203,8495 | 203,4162 | |
| 34 | 200,98 | 390,665 | 377,568 | -8,0516 | 64,8281 | 209,0316 | 196,1097 | |
| 38 | 208,21 | 400,455 | 390,665 | -8,5958 | 73,8871 | 216,8058 | 216,8058 | |

Model agregátní spotřební funkce

| alfa | t-test | FR-test |
|------|--------|---------|
| 0,05 | 2,0395 | 3,3048 |

| n |
|----|
| 34 |

FR (65,4747) je větší než FR-test (2,0395)
že $|b_i|/s_{b_i}$ jsou větší než hodnota t-testu.

$$e_t - e_{t-1}$$

$$(e_t - e_{t-1})^2$$

| | |
|----------|----------|
| 1,8922 | 3,5802 |
| -7,8118 | 61,0240 |
| 15,2814 | 233,5226 |
| -13,0262 | 169,6822 |
| 3,0924 | 9,5629 |
| -4,1421 | 17,1571 |
| 17,3887 | 302,3673 |
| -14,9939 | 224,8178 |
| 6,1533 | 37,8629 |
| -7,3129 | 53,4789 |
| 17,5770 | 308,9503 |
| -10,3807 | 107,7579 |
| 2,2347 | 4,9937 |
| -13,1480 | 172,8699 |
| 20,3030 | 412,2103 |
| -9,9873 | 99,7453 |
| -10,3277 | 106,6620 |
| 10,1987 | 104,0129 |
| 9,0388 | 81,7001 |
| -5,9902 | 35,8819 |
| -9,7281 | 94,6369 |
| 11,6764 | 136,3391 |
| 9,1382 | 83,5063 |
| -10,2869 | 105,8195 |
| -10,5481 | 111,2620 |
| 12,5709 | 158,0267 |
| 4,8689 | 23,7066 |
| -9,4014 | 88,3866 |
| -8,7366 | 76,3289 |
| 13,6321 | 185,8334 |
| 5,1693 | 26,7214 |
| -9,9705 | 99,4109 |
| -9,3750 | 87,8909 |
| 3825,71 | |

| |
|--------|
| 0,2255 |
| 7,1321 |

| | | |
|----------|------------------|----|
| 415,7755 | | |
| 725,4035 | T= | 34 |
| | T ₂ = | 6 |

| | | |
|--------|-------------------|----|
| 1,7447 | $2 \cdot (k+1) =$ | 6 |
| | d.f. = | 11 |

2,8179

$s \sqrt{(T-T_2-2(k+1))/2}$ a $(T-T_2-2(k+1))/2$ stupni volnosti

Test nezamítá nulovou hypotézu homoskedasticity
Hodnota F21 nepřevyšuje kritickou hodnotu testu 2,8179

Řazeno vzestupně podle hodnot proměnné Y_t

ých 6 prostředních pozorování
ých 6 prostředních pozorování
ých 6 prostředních pozorování
ých 6 prostředních pozorování
ých 6 prostředních pozorování