
Hildegart A. Ahumada
(UTDT)
Maria Lorena Garegnani
(UNLP - BCRA)
The effects of wealth on consumers’ expenditure have been widely studied: Ando and Modigliani (1963), Friedman (1957) (and Duesenberry (1949), Brown (1952)).

A revival of the discussion around the topic was motivated by Hall’s work (1978) and DHSY (1978).
Role of interest rates and liquidity constraints.

In the case of unstable economies like Argentina the role of wealth effects deserves a more careful assessment.

Heymann and Sanguinetti (1998) have suggested that consumers’ behaviour responds to “wealth perception”.
In the case of Emerging Economies...

- Given the different nature of shocks, a unique and time-invariant determinant of wealth, which could be used as instrument for consumption decisions, may not exist.
- Inflation, real exchange rate and debt default risk premium are studied as different “summary” measures of adjusting “wealth”.

This paper is aimed at modelling an aggregate consumption function for Argentina during the last two decades, a period of large macroeconomic variability.
A review of the literature

- Year 1978: DHSY and Hall.
A review of the literature

- Application of DHSY and HUS to a developing country: Campos and Ericsson (2000).
The data

- **Gross national disposable income**: the income of the factors owners that participate in the production process inside the country and in the rest of the world adjusted by payments (or reception) of current transfers to (or from) the rest of the world. The gross national disposable income is obtained as the sum of the gross national income and the current net transfers.

- **Private consumer’s expenditure**: the sum of the expenditure on goods and services of private residents and non-profit institutions.
In spite of the two different periods observed in Figure 1, the co-
movements of both variables seem to maintain a strong positive linear relationship (the correlation coefficient is 0.986). This suggests the long–run relationship between private consumption and gross national disposable income, which was econometrically studied taking into account time series properties.

For the series analysed, private consumption is 7 % more volatile than disposable income.
Econometric results. The bivariate system

lconspriv and lincdisp system

1981(1) to 2000(4) (4 lags and d88,d892,d893 and constant unrestricted)

<table>
<thead>
<tr>
<th>λi</th>
<th>Ho:r=p</th>
<th>Maxλi</th>
<th>Tr</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.296</td>
<td>p==0</td>
<td>28.18**</td>
<td>25.36**</td>
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<tr>
<td>0.033</td>
<td>p&lt;=1</td>
<td>2.765</td>
<td>2.488</td>
</tr>
</tbody>
</table>

α

| Δlconspriv | -0.60133 | -0.085455 | 1.0000 | -0.96395 |
| Δlincdisp  | -0.03421  | -0.079089  | -1.0463 | 1.0000   |

β

LR test (r=1)

Ho: α1=0; Chi^2(1) = 7.2904 [0.0069]**
Ho: α2=0; Chi^2(1) = 0.0386 [0.8441]
Ho: β2=-1; Chi^2(1) = 0.30817 [0.5788]
Therefore the relationship between these two variables could be modeled as an equilibrium correction model of the form of DHSY (1978) and Davidson and Hendry (1981):

\[ \Delta \text{lconspriv}_t = \delta_0 + \delta_1 \Delta \text{lincdisp}_t - \delta_2( \text{lconspriv}_{t-1} - \text{lincdisp}_{t-1}) + \varepsilon_t \]
**Equation 1**

\[
\text{Dpondcpriv} = +0.02034 + D\text{Lincdisp} + 0.925 + \text{efdues} + 0.2894 - 0.5386 \text{Eqconsprivincdisp}_1 - 0.1063 \text{drealexchrate34} - 0.005419 \text{Dsrteq} - 0.06163 \text{d871} - 0.1154 \text{d881} - 0.0477 \text{d931} - 0.03885 \text{d982} \\
\text{(SE)} (0.003953) (0.07763) (0.05223) (0.08491) (0.03597) (0.002717) (0.02022) (0.02006) (0.02028) (0.02012)
\]

\[R^2 = 0.842447 \quad F(9,69) = 40.994 [0.0000] \quad \sigma = 0.0197939 \quad DW = 2.10\]

\[\text{RSS} = 0.02703411943 \text{ for 10 variables and 79 observations}\]
\begin{equation}
\text{Dpondcpriv} = +0.01778 +0.9366 \text{ DLincdisp} +0.2647 \text{ efdues}
\end{equation}

\begin{align*}
\text{(SE)} & \quad (0.003988) \quad (0.08025) \quad (0.0534) \\
-0.537 \text{ Eqconsprivincdisp}_1 & -0.1105 \text{ drealexchrate34} -0.06074 \text{ d871} \\
\quad (0.08814) & \quad (0.03731) \quad (0.02099) \\
-0.1137 \text{ d881} & -0.04544 \text{ d931} \\
\quad (0.02082) & \quad (0.02103)
\end{align*}

\[ R^2 = 0.825275 \quad F(7, 71) = 47.907 \quad [0.0000] \quad \sigma = 0.0205491 \quad \text{DW}=1.99 \]

\[ RSS = 0.02998075994 \text{ for 8 variables and 79 observations} \]
Recursive graphics

- Constant
- DLincdisp
- efdues
- Eqconsprivincdisp_1
- drealexchrate34
An interpretation in terms of liquidity constraints?

- Model of Equation 2, does not admit an interpretation in terms of Rossi’s model which follows Muellbauer and Bover (1986) view of DHYS.

Wald test for linear restrictions: $\beta_{\text{Dincdisp}} = \beta_{\text{Eqconsprivincdisp-1}}$
LinRes $F(1, 70) = 168.73$ [0.0000] **

- Equation 3
\[
D\text{pondcpriv} = +0.02043 + 0.2685 \text{efdues} - 0.5387\text{Eqconsprivincdisp-1} \\
+0.00459 \quad 0.05597 \quad 0.08697 \\
-0.1113 \text{dreallexchrate34} - 0.005458 \text{Dsrteq} - 0.06251 \text{d871} \\
(0.03714) \quad (0.002798) \quad (0.02083) \\
-0.1136 \text{d881} - 0.0471 \text{d931} + 0.8515 D\text{posincdisp} \\
(0.02057) \quad (0.02078) \quad 0.1478 \\
+0.9968 D\text{negincdisp} \\
(0.1515)
\]
R$^2=0.834718$ $F(9,69)=38.719$ [0.0000] $\sigma=0.0202736$ $DW=2.05$
RSS = 0.0283603686 for 10 variables and 79 observations

Wald test for linear restrictions: $\beta_{D\text{posincdisp}} = \beta_{D\text{negincdisp}}$
LinRes $F(1, 69) = 0.32877$ [0.5682]
Conclusions and policy implications

Results

- National disposable income is the only long-run determinant of private consumption and one of its short-run determinants.
- The proxies adopted by the consumers as short-run determinants appear to be: a measure of real exchange rate and an effect associated with last peak income.
- Inflation and its asymmetric effect, the role of liquid assets, interest rates and labour income and demographic variables were evaluated with no significant additional effects.
According to the results...

- If national disposable income decreases about 10%, private consumption will also decrease about 9% in the next quarter. Considering the Duesenberry’s effect, if national disposable income were a 20% below the last peak value, the additional fall in private consumption will be more than 5%.

- Isolating the estimated effect of the wholesale to consumers prices ratio during the first quarter of 2002, 32% and 9.7% accumulated respectively, a decrease in private consumption of about 2.5% could be expected in the next third quarter.
From the model specification obtained for the data and sample of this study:

- Relaxing financial restrictions imposed by the “corralito” would not have -per se- any effect on private consumption because consumers’ expenditure is dependent on other measures of “wealth” rather than the one associated with liquid assets.

- A stabilisation of real exchange rate appears as a necessary condition to stop consumption falls.
Evaluating economic results
An asymmetric effect of inflation

\[ D\text{pondcpriv} = +0.01951 +0.9167 \text{DLincdisp} +0.2917 \text{efdues} \]
\[ (SE) \quad (0.004298) \quad (0.09112) \quad (0.06707) \]
\[ -0.1102 \text{drealalexchrate34} -0.005339 \text{Dsrteq} -0.535 \text{EqConinc}_1 \]
\[ (0.04099) \quad (0.002816) \quad (0.08871) \]
\[ -0.06107 \text{d871} -0.1147 \text{d881} -0.04701 \text{d931} \]
\[ (0.0209) \quad (0.02076) \quad (0.02099) \]
\[ -0.003839 \text{Dinflpreconvpos} +0.004575 \text{Dinflpreconvneg} \]
\[ (0.01488) \quad (0.01681) \]

\[ R^2 = 0.834222 \quad F(10, 68) = 34.219 \quad [0.0000] \quad \sigma = 0.0204528 \quad DW = 2.05 \]
\[ \text{RSS} = 0.02844547146 \quad \text{for 11 variables and 79 observations} \]
Evaluating the econometric results

An asymmetric effect of inflation

\[
\begin{align*}
D_{pondcpriv} &= +0.02008 & +0.892 & DLincdisp & +0.34 & efdues \\
&S\text{ (SE)} & (0.004048) & (0.08315) & (0.07423) \\
-0.5292 & Eqconsprivincdisp_1 & -0.09574 & drealexchrate\_t34 & -0.005457 & Dsrteq \\
&S \text{ (SE)} & (0.08672) & (0.03813) & (0.002765) \\
-0.06109 & d871 & -0.1184 & d881 & -0.04757 & d931 \\
&S \text{ (SE)} & (0.02055) & (0.02067) & (0.02062) \\
+0.004272 & \text{ inflatml\_1} \\
&S \text{ (SE)} & (0.003626) \\
\end{align*}
\]

\[R^2 = 0.837206 \quad F(9, 69) = 39.428 \quad [0.0000] \quad \sigma = 0.0201205 \quad DW = 2.08\]

RSS = 0.02793354081 for 10 variables and 79 observations
Evaluating the econometric results
Incorporating liquid assets and the interest rate

\[
\begin{align*}
D_{\text{pondcpriv}} &= +0.01814 +0.8518 D_{\text{Lincdisp}} +0.2817 \text{efdues} \\
(SE) &= (0.004048) (0.08779) (0.05544) \\
-0.1605 &\text{drelalexchrate34} -0.005243 D_{\text{srteq}} -0.5408 \text{EqCconinc1} \\
(SE) &= (0.04984) (0.002751) (0.09224) \\
-0.06332 &\text{d871} -0.1116 \text{d881} -0.04568 \text{d931} \\
(SE) &= (0.02058) (0.02028) (0.02052) \\
-0.003476 &\text{Dm3*} \\
(SE) &= (0.01863) \\
R^2 &= 0.847687 \quad F(9,53)=32.774 [0.0000] \quad \sigma = 0.0199911 \quad DW=2.25 \\
\text{RSS} &= 0.02118107251 \text{ for 10 variables and 63 observations}
\end{align*}
\]

\[
\begin{align*}
D_{\text{pondcpriv}} &= +0.02028 +0.8933 D_{\text{Lincdisp}} +0.3014 \text{efdues} \\
(SE) &= (0.004363) (0.09161) (0.06375) \\
-0.005421 &\text{Dsrteq} -0.5485 \text{Eqconspricidisp1} -0.1037 \text{drelalexchrate34} \\
(SE) &= (0.002788) (0.08809) (0.03756) \\
-0.06052 &\text{d871} -0.1132 \text{d881} -0.04667 \text{d931} \\
(SE) &= (0.02072) (0.0206) (0.02075) \\
-0.002517 &\text{rint} \\
(SE) &= (0.003874) \\
R^2 &= 0.834941 \quad F(9,69)=38.781 [0.0000] \quad \sigma = 0.02026 \quad DW=2.02 \\
\text{RSS} &= 0.02832214503 \text{ for 10 variables and 79 observations}
\end{align*}
\]
Evaluating the economic results

The role of wages and unemployment

\[
\begin{align*}
D\text{pondcpriv} & = +0.02194 & +0.8998 & D\text{Lincdisp} & +0.3138 & \text{efdues} \\
\text{(SE)} & (0.004085) & (0.08555) & (0.05439) \\
-0.005616 & D\text{srteq} & -0.5716 & \text{Eqconsprivincdisp}_1 & -0.05259 & d871 \\
\text{(0.002858)} & (0.08934) & (0.02123) \\
-0.1164 & d881 & -0.04482 & d931 & +0.04803 & D\text{Lrealwage} \\
\text{(0.02112)} & (0.02133) & (0.02434) \\
\end{align*}
\]

\[R^2 = 0.82297 \quad F(8,70) = 40.677 \quad [0.0000] \quad \sigma = 0.0208314 \quad DW = 1.87\]

\[\text{RSS} = 0.03037616035 \quad \text{for 9 variables and 79 observations}\]
Evaluating the econometric results

Incorporating stock prices

\[
\begin{align*}
Dpondcpriv &= +0.01755 & \text{DLincdisp} &= +0.8248 \\
(\text{SE}) &= (0.004394) & (\text{SE}) &= (0.09756) \\
-0.1349 \text{ drealexchrate34} &= -0.005594 \text{ Dsrteq} \\
(\text{SE}) &= (0.04406) & (\text{SE}) &= (0.002821) \\
-0.04345 \text{ d931} &= -0.007981 \text{ DLMerval} \\
(\text{SE}) &= (0.02092) & (\text{SE}) &= (0.00779)
\end{align*}
\]

\[R^2=0.825379 \quad F(7,43)=29.035 \quad [0.0000] \quad \sigma=0.0202497 \quad DW=2.19\]

\[\text{RSS}=0.01763208849 \text{ for 8 variables and 51 observations}\]
Evaluating the econometric results

demographic variables

\[
\begin{align*}
\text{DLconspc} &= +0.009277 +1.026 \text{ DLincdispc} +0.1739 \text{ efdues} \\
(\text{SE}) &= (0.004095) (0.082) (0.05638) \\
-0.07745 \text{ drealexchrate34} &-0.004652 \text{ Dsrteq} -0.7469 \text{ Eqconsprivincdisp}_1 \\
(0.03875) & (0.002933) (0.09187) \\
-0.07399 \text{ d871} &-0.1245 \text{ d881} -0.04639 \text{ d931} \\
(0.02178) & (0.02157) (0.02185) \\
R^2 &= 0.844811 F(8,70)=47.633 [0.0000] \quad \sigma = 0.0213179 \quad DW=2.30 \\
\text{RSS} &= 0.03181182445 \text{ for 9 variables and 79 observations}
\end{align*}
\]

\[
\begin{align*}
\text{DLconspc} &= -0.00506 +1.029 \text{ DLincdispc} +0.1692 \text{ efdues} \\
(\text{SE}) &= (0.09269) (0.0838) (0.06436) \\
-0.07779 \text{ drealexchrate34} &-0.004696 \text{ Dsrteq} -0.7486 \text{ Eqconsprivincdisp}_1 \\
(0.03908) & (0.002968) (0.0932) \\
-0.07377 \text{ d871} &-0.1241 \text{ d881} -0.04638 \text{ d931} \\
(0.02198) & (0.02188) (0.022) \\
+0.03588 \text{ eap} & \\
(0.2317)
\end{align*}
\]

\[
\begin{align*}
R^2 &= 0.844865 F(9,69)=41.753 [0.0000] \quad \sigma = 0.0214681 \quad DW=2.29 \\
\text{RSS} &= 0.03180077747 \text{ for 10 variables and 79 observations}
\end{align*}
\]
Appendix 1: Data definitions and sources

- Private Consumption: Sum of the expenditure in goods and services of private residents and non-profit institutions (thousands of pesos at 1986 prices). Statistical Appendix of Economic Ministry and ECLAC Bs.As.
- Real exchange rate: Ratio of wholesale to consumer prices. INDEC.
- Inflation: (pt – pt-1) being pt the log of general level of consumers’ prices. INDEC.
- M1: Narrow money and current account deposits. B.C.R.A.
- M3: Narrow money and all kind of bank deposits in pesos. M3* also includes deposits in dollars. B.C.R.A.
- Real wages: Industrial real wages. ECLAC Bs.As.
- Unemployment: Rate of unemployment. INDEC.
All cases include the constant and j indicates the lags of the Augmented Dickey-Fuller (ADF) test. In all cases the null hypothesis of order of integration equal to one can not be rejected at traditional levels of 1% and 5%.
The system with the three measures of perception of wealth

Lconspriv, lincdisp, exchrate, srteq and inflpreconv system

1980(4) to 2000(4) (2 lags and d823,d902 and constant unrestricted)

\[
\begin{array}{ccccccc}
\lambda_i & H_0: r = p & \text{Max} \lambda_i & Tr \\
0.351518 & p = 0 & 35.08* & 30.75 & 33.5 & 80.91** & 70.92* & 68.5 \\
0.238787 & p = 1 & 22.1 & 19.37 & 27.1 & 45.83 & 40.17 & 47.2 \\
0.180871 & p = 2 & 16.16 & 14.17 & 21.0 & 23.73 & 20.8 & 29.7 \\
0.080015 & p = 3 & 6.755 & 5.922 & 14.1 & 7.566 & 6.632 & 15.4 \\
0.009955 & p = 4 & 0.8105 & 0.7104 & 3.8 & 0.8105 & 0.7104 & 3.8 \\
\end{array}
\]

\(\max \lambda_i\) is the maximum eigenvalue statistic \((-T \ln \lambda_i)\) and \(Tr\) is the Trace statistic \((-T \ln \Sigma (1-\lambda_i))\) for each statistic the second column presents the adjusted by degree of freedom and the third the 95\% (Osterwald-Lenum,1992) critical values (See Hendry and Doornik (1997)).

\[
\beta' =
\begin{pmatrix}
1.0000 & -0.98811 & 0.016339 & -0.00091301 & -0.0046196 \\
-1.0492 & 1.0000 & 0.66504 & 0.0024484 & -1.5896 \\
-2.0380 & 7.5881 & 1.0000 & -0.16885 & 0.22398 \\
17.877 & 7.2274 & 28.391 & 1.0000 & -7.1898 \\
-3.3171 & 9.0524 & 0.63104 & 0.14945 & 1.0000
\end{pmatrix}
\]

\(\alpha\) is the matrix of standardised weight coefficients and \(\beta'\) the matrix of eigenvectors (cointegration vectors and their weights in bold)
The system with the three measures of perception of wealth

LR test (r=1)
Ho: $\alpha 0=0$; $\chi^2(1) = 5.1671 \ [0.0230] \ *$
Ho: $\alpha 1=0$; $\chi^2(1) = 1.1956 \ [0.2742]$
Ho: $\alpha 2=0$; $\chi^2(1) = 0.1905 \ [0.6625]$
Ho: $\alpha 3=0$; $\chi^2(1) = 0.00964[0.9218]$
Ho: $\alpha 4=0$; $\chi^2(1) = 0.01451[0.9041]$
Ho: $\beta 6=0$; $\chi^2(1) = 12.77 \ [0.0004] \ **$
Ho: $\beta 6=1$; $\chi^2(1) = 0.01549[0.9009]$
Ho: $\beta 7=0$; $\chi^2(1) = 0.25581[0.6130]$
Ho: $\beta 8=0$; $\chi^2(1) = 0.09577[0.7570]$
Ho: $\beta 9=0$; $\chi^2(1) = 0.01808[0.8930]$
LR is the likelihood ratio statistics assuming rank =1
A three variable system of private consumption, national disposable income and m3*

Loonspriv, lincdisp and m3*  
1985(4) to 2000(4) (3 lags and d902, d854, d901, d953 and constant unrestricted)

<table>
<thead>
<tr>
<th>λi</th>
<th>Ho: r=p</th>
<th>Maxλi</th>
<th>Tr</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.478</td>
<td>p=0</td>
<td>39.73**</td>
<td>53.44**</td>
</tr>
<tr>
<td>0.162</td>
<td>p&lt;=1</td>
<td>11.16</td>
<td>13.71</td>
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<tr>
<td>0.040</td>
<td>p&lt;=2</td>
<td>2.551</td>
<td>3.8</td>
</tr>
</tbody>
</table>

MAX λi is the maximum eigenvalue statistic(-Tlnλi) and Tr is the Trace statistic(-Tln Σ(1-λi)) for each statistic the second column presents the adjusted by degree of freedom and the third the 95% (Osterwald-Lenum, 1992) critical values (See Hendry and Doornik (1997)).

α  
ΔLconspriv  -0.31484  0.041120  -0.0028  1.0000  -1.0778  0.0051340
ΔLincdisp   0.80313  0.027521  -0.00159  0.79846  1.0000  -0.68369
Δm3*        1.1340   0.16583  -0.00060  4.5123   11.345  1.0000

β’

α is the matrix of standardised weight coefficients and β’ the matrix of eigenvectors (cointegration vectors and their weights in bold)
### Unrestricted model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient 1</th>
<th>Coefficient 2</th>
<th>Coefficient 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lconspriv</td>
<td>+0.8325</td>
<td>+0.2482</td>
<td>+0.11</td>
</tr>
<tr>
<td>(SE)</td>
<td>(0.4704)</td>
<td>(0.08063)</td>
<td>(0.07712)</td>
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<tr>
<td>Lconspriv_3</td>
<td>-0.06822</td>
<td>+0.3958</td>
<td>+1.037</td>
</tr>
<tr>
<td>(0.07135)</td>
<td>(0.07769)</td>
<td>(0.1227)</td>
<td></td>
</tr>
<tr>
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<td>-0.1839</td>
<td>-0.000555</td>
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<tr>
<td>(0.1308)</td>
<td>(0.1238)</td>
<td>(0.1311)</td>
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<tr>
<td>Lincdisp_4</td>
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<td>-0.04322</td>
<td>-0.04366</td>
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<tr>
<td>(0.1149)</td>
<td>(0.04532)</td>
<td>(0.057)</td>
<td></td>
</tr>
<tr>
<td>realexchrate_2</td>
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<td>-0.07976</td>
<td>+0.1401</td>
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<tr>
<td>(0.08524)</td>
<td>(0.08441)</td>
<td>(0.05098)</td>
<td></td>
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<tr>
<td>srteq_3</td>
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<td>+0.0004975</td>
<td>+0.003516</td>
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<tr>
<td>(0.002306)</td>
<td>(0.003011)</td>
<td>(0.002996)</td>
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<td>(0.00304)</td>
<td>(0.002501)</td>
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<tr>
<td>d881</td>
<td>-0.09108</td>
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<td>-0.07743</td>
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<tr>
<td>(0.01878)</td>
<td>(0.01857)</td>
<td>(0.01759)</td>
<td></td>
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<tr>
<td>d982</td>
<td>-0.03912</td>
<td>-0.03745</td>
<td>+0.01529</td>
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<td>(0.01762)</td>
<td>(0.01488)</td>
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<td>inflpreconv_1</td>
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<td>-0.02002</td>
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<td>(0.01606)</td>
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<tr>
<td>inflpreconv_4</td>
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<td>-0.02996</td>
<td></td>
</tr>
<tr>
<td>(0.01299)</td>
<td>(0.01688)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R² = 0.995125  F(31,47) = 309.48 [0.0000]  σ = 0.0152045  DW = 1.77
RSS = 0.0108652937 for 32 variables and 79 observations
Unrestricted model

Test Summary

AR 1-4  F(4, 44) = 0.96829 [0.4345]
ARCH 4  F(4, 40) = 0.91589 [0.4641]
Normality Chi^2(2) = 8.1202 [0.0172]
RESET   F(1, 47) = 3.5712 [0.0650]

where LM statistics of autocorrelation (AR), heteroskedasticity (ARCH, square (\(x_i^2\)) and square and cross-product (\(x_i x_j\)) of regressors); Normality and Specification (RESET) are reported (see Hendry and Doornik, 1996).

Coefficient tests

Wald test for linear restrictions: \(\beta_{\text{Lconspriv}_1} = 0.26000\)
LinRes  F(1, 47) = 0.021585 [0.8838]

Wald test for linear restrictions: \(\beta_{\text{Lconspriv}_4} = 0.20000\)
LinRes  F(1, 47) = 6.3491 [0.0152] *
Modelling Dpondcpriv by OLS (using Consdues.in7)
The present sample is: 1981 (2) to 2000 (4)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std.Error</th>
<th>t-value</th>
<th>t-prob</th>
<th>Part R^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.021910</td>
<td>0.0038440</td>
<td>5.700</td>
<td>0.0000</td>
<td>0.3139</td>
</tr>
<tr>
<td>D Lingrdisp</td>
<td>0.95331</td>
<td>0.075764</td>
<td>12.583</td>
<td>0.0000</td>
<td>0.6904</td>
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<tr>
<td>efdues</td>
<td>0.26210</td>
<td>0.053596</td>
<td>4.890</td>
<td>0.0000</td>
<td>0.2520</td>
</tr>
<tr>
<td>Eq consprivi_1</td>
<td>-0.54212</td>
<td>0.083267</td>
<td>-6.511</td>
<td>0.0000</td>
<td>0.3738</td>
</tr>
<tr>
<td>dtcreal34pos</td>
<td>-0.15363</td>
<td>0.050780</td>
<td>-3.025</td>
<td>0.0035</td>
<td>0.1142</td>
</tr>
<tr>
<td>dseasfirstquarter</td>
<td>-0.048972</td>
<td>0.011809</td>
<td>-4.147</td>
<td>0.0001</td>
<td>0.1950</td>
</tr>
<tr>
<td>d881</td>
<td>-0.067768</td>
<td>0.022712</td>
<td>-2.984</td>
<td>0.0039</td>
<td>0.1114</td>
</tr>
<tr>
<td>d982</td>
<td>-0.040671</td>
<td>0.019841</td>
<td>-2.050</td>
<td>0.0441</td>
<td>0.0559</td>
</tr>
</tbody>
</table>

R^2 = 0.842136  F(7,71) = 54.108 [0.0000] \sigma = 0.0195324  DW = 1.95
RSS = 0.02708753143 for 8 variables and 79 observations
Future research

AR 1-5 F(5, 66) = 1.4515 [0.2177]
ARCH 4 F(4, 63) = 2.1172 [0.0891]
Normality Chi^2(2) = 1.7118 [0.4249]
Xi^2 F(11, 59) = 1.2775 [0.2600]
Xi*Xi F(19, 51) = 1.4016 [0.1683]
RESET F(1, 70) = 0.20914 [0.6489]