

Online Appendix for “Diverging Cost of Living”

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Table 5: Regression of expenditure shares (owned housing measured with mortgage)

	<i>Dependent variable:</i>							
	Food (1)	Housing (2)	H'hold exp. (3)	Clothing (4)	Transportation (5)	Health (6)	Entertainment (7)	Education (8)
Time	0.258*** (0.029)	0.011 (0.032)	-0.013 (0.024)	-0.232*** (0.014)	0.020 (0.030)	0.042** (0.017)	-0.037** (0.016)	-0.048** (0.025)
Age: 25-34	-1.291*** (0.173)	6.636*** (0.204)	2.299*** (0.140)	-2.519*** (0.105)	0.149 (0.198)	1.187*** (0.078)	-0.862*** (0.104)	-5.599*** (0.181)
Age: 35-44	-1.070*** (0.174)	8.654*** (0.204)	1.760*** (0.140)	-3.112*** (0.107)	-1.410*** (0.197)	1.946*** (0.081)	-0.633*** (0.106)	-6.135*** (0.178)
Age: 45-54	-1.192*** (0.176)	6.980*** (0.206)	1.575*** (0.141)	-3.523*** (0.108)	-0.460** (0.198)	3.085*** (0.084)	-0.927*** (0.107)	-5.538*** (0.183)
Age: 55-64	-1.145*** (0.182)	5.090*** (0.215)	2.709*** (0.148)	-3.698*** (0.111)	-0.648*** (0.205)	5.222*** (0.097)	-0.868*** (0.112)	-6.663*** (0.186)
Age: 65-74	-0.865*** (0.189)	2.135*** (0.225)	3.531*** (0.156)	-3.971*** (0.114)	-2.627*** (0.214)	10.231*** (0.113)	-1.447*** (0.116)	-6.988*** (0.187)
Age: 75+	-1.636*** (0.193)	2.200*** (0.239)	5.729*** (0.168)	-4.851*** (0.114)	-6.328*** (0.216)	14.531*** (0.131)	-2.617*** (0.114)	-7.027*** (0.189)
Ethnicity: White	-0.330*** (0.099)	-0.534*** (0.138)	-3.441*** (0.093)	-1.088*** (0.056)	2.002*** (0.124)	1.779*** (0.064)	1.228*** (0.052)	0.384*** (0.056)
Region: Northeast	1.007*** (0.087)	2.518*** (0.130)	-0.196** (0.087)	0.453*** (0.049)	-1.863*** (0.119)	-1.390*** (0.071)	-0.288*** (0.057)	-0.240*** (0.068)
Region: South	1.336*** (0.075)	-1.429*** (0.108)	0.797*** (0.075)	-0.136*** (0.039)	0.777*** (0.106)	-0.115* (0.066)	-0.500*** (0.050)	-0.731*** (0.051)
Region: West	-0.054 (0.080)	3.334*** (0.123)	-1.362*** (0.080)	0.019 (0.042)	-0.210* (0.113)	-0.974*** (0.069)	-0.723*** (0.054)	-0.030 (0.062)
Urban: yes	-0.205* (0.106)	5.436*** (0.144)	-0.643*** (0.109)	0.353*** (0.051)	-3.476*** (0.155)	-1.600*** (0.099)	-0.417*** (0.072)	0.552*** (0.050)
Edu.: college	-4.317*** (0.120)	2.985*** (0.187)	-1.213*** (0.123)	0.590*** (0.061)	0.240 (0.166)	-0.204* (0.105)	0.161** (0.076)	1.757*** (0.078)
Edu.: high school	-3.255*** (0.095)	0.385*** (0.129)	-0.947*** (0.088)	0.229*** (0.043)	1.950*** (0.120)	0.181** (0.078)	0.439*** (0.054)	1.018*** (0.033)
HH size	0.537*** (0.022)	-0.897*** (0.031)	0.129*** (0.020)	0.170*** (0.012)	0.436*** (0.029)	-0.041*** (0.015)	-0.306*** (0.013)	-0.028** (0.013)
Renter: yes	1.390*** (0.074)	6.687*** (0.105)	-3.530*** (0.068)	-0.063 (0.041)	-2.276*** (0.093)	-1.526*** (0.054)	-0.219*** (0.045)	-0.463*** (0.052)
Income: 21-40th	-1.512*** (0.102)	-2.213*** (0.138)	0.881*** (0.092)	-0.021 (0.049)	1.741*** (0.124)	1.377*** (0.079)	0.568*** (0.058)	-0.821*** (0.067)
Income: 41-60th	-3.449*** (0.093)	-1.605*** (0.133)	-0.306*** (0.087)	0.035 (0.048)	4.651*** (0.121)	1.290*** (0.074)	0.653*** (0.057)	-1.270*** (0.059)
Income: 61-80th	-4.770*** (0.092)	0.057 (0.136)	-0.917*** (0.089)	0.155*** (0.049)	5.029*** (0.124)	0.311*** (0.072)	0.906*** (0.058)	-0.771*** (0.063)
Income: 81-100th	-6.014*** (0.096)	2.688*** (0.151)	-1.111*** (0.099)	0.656*** (0.053)	3.359*** (0.135)	-0.930*** (0.077)	1.130*** (0.064)	0.223*** (0.074)
Time x Age: 25-34	-0.065*** (0.019)	-0.128*** (0.020)	-0.014 (0.015)	0.088*** (0.009)	0.011 (0.019)	0.039*** (0.009)	0.053*** (0.010)	0.017 (0.020)
Time x Age: 35-44	-0.105*** (0.019)	-0.159*** (0.020)	0.004 (0.015)	0.108*** (0.009)	0.038** (0.019)	0.038*** (0.009)	0.056*** (0.010)	0.020 (0.019)
Time x Age: 45-54	-0.148*** (0.019)	-0.092*** (0.020)	-0.024 (0.015)	0.111*** (0.010)	0.007 (0.019)	0.025*** (0.009)	0.071*** (0.011)	0.050** (0.020)
Time x Age: 55-64	-0.167*** (0.019)	-0.054*** (0.021)	-0.049*** (0.015)	0.110*** (0.010)	0.012 (0.019)	0.032*** (0.010)	0.064*** (0.011)	0.053*** (0.020)
Time x Age: 65-74	-0.218*** (0.020)	0.035 (0.022)	-0.092*** (0.016)	0.116*** (0.010)	0.028 (0.020)	0.011 (0.011)	0.094*** (0.011)	0.026 (0.021)
Time x Age: 75+	-0.214*** (0.020)	0.020 (0.023)	-0.152*** (0.017)	0.145*** (0.010)	0.058*** (0.020)	0.0004 (0.012)	0.116*** (0.011)	0.027 (0.021)

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	<i>Dependent variable:</i>							
	Food (1)	Housing (2)	H'hold exp. (3)	Clothing (4)	Transportation (5)	Health (6)	Entertainment (7)	Education (8)
Time x Ethnicity: White	0.037*** (0.009)	0.043*** (0.012)	0.092*** (0.008)	0.028*** (0.005)	-0.143*** (0.011)	-0.023*** (0.006)	-0.032*** (0.005)	-0.003 (0.005)
Time x Region: Northeast	-0.052*** (0.008)	0.041*** (0.012)	-0.004 (0.008)	-0.012*** (0.004)	0.036*** (0.010)	-0.025*** (0.007)	-0.012** (0.005)	0.029*** (0.007)
Time x Region: South	0.020*** (0.007)	-0.012 (0.010)	-0.021*** (0.007)	-0.005 (0.003)	0.034*** (0.009)	-0.036*** (0.006)	0.004 (0.005)	0.016*** (0.005)
Time x Region: West	0.032*** (0.007)	-0.0003 (0.011)	0.026*** (0.007)	-0.006* (0.003)	-0.004 (0.010)	-0.048*** (0.006)	0.010** (0.005)	-0.010* (0.005)
Time x Urban: yes	-0.018 (0.011)	0.087*** (0.014)	-0.056*** (0.011)	-0.009** (0.004)	0.047*** (0.015)	0.008 (0.010)	-0.057*** (0.007)	-0.003 (0.005)
Time x Edu.: college	0.005 (0.011)	-0.003 (0.017)	0.001 (0.011)	-0.032*** (0.005)	-0.051*** (0.014)	0.083*** (0.010)	-0.007 (0.007)	0.003 (0.007)
Time x Edu.: high school	0.015* (0.009)	-0.004 (0.012)	0.020** (0.008)	-0.024*** (0.004)	-0.057*** (0.011)	0.070*** (0.007)	-0.007 (0.005)	-0.014*** (0.004)
Time x HH size	-0.013*** (0.002)	-0.015*** (0.003)	0.015*** (0.002)	-0.001 (0.001)	0.004* (0.003)	0.003* (0.001)	0.001 (0.001)	0.006*** (0.001)
Time x Renter: yes	-0.109*** (0.007)	0.215*** (0.009)	-0.049*** (0.006)	0.014*** (0.003)	-0.008 (0.008)	-0.028*** (0.005)	-0.037*** (0.004)	0.001 (0.005)
Time x Income: 21-40th	0.005 (0.010)	-0.024* (0.013)	0.043*** (0.009)	0.013*** (0.004)	-0.024** (0.011)	-0.051*** (0.008)	0.018*** (0.005)	0.019*** (0.007)
Time x Income: 41-60th	0.026*** (0.009)	-0.099*** (0.012)	0.063*** (0.008)	0.010*** (0.004)	-0.044*** (0.011)	0.020*** (0.007)	0.006 (0.005)	0.019*** (0.006)
Time x Income: 61-80th	0.038*** (0.009)	-0.140*** (0.012)	0.047*** (0.008)	0.003 (0.004)	-0.043*** (0.011)	0.108*** (0.007)	-0.001 (0.005)	-0.012** (0.006)
Time x Income: 81-100th	0.031*** (0.009)	-0.121*** (0.013)	-0.002 (0.009)	-0.011*** (0.004)	-0.022* (0.011)	0.132*** (0.007)	0.006 (0.006)	-0.013** (0.007)
Constant	23.377*** (0.272)	15.189*** (0.329)	18.513*** (0.234)	7.789*** (0.154)	17.187*** (0.313)	2.884*** (0.172)	8.219*** (0.162)	6.842*** (0.226)
Observations	560,371	560,371	560,371	560,371	560,371	560,371	560,371	560,371
R ²	0.073	0.133	0.066	0.065	0.063	0.231	0.022	0.055
Adjusted R ²	0.072	0.133	0.066	0.065	0.063	0.231	0.022	0.055

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 6: Regression of expenditure shares (owned housing measured with OER)

	<i>Dependent variable:</i>							
	Food (1)	Housing (2)	H'hold exp. (3)	Clothing (4)	Transportation (5)	Health (6)	Entertainment (7)	Education (8)
Time	0.307*** (0.028)	-0.124*** (0.029)	0.024 (0.023)	-0.227*** (0.014)	0.022 (0.029)	0.071*** (0.017)	-0.028* (0.016)	-0.045* (0.025)
Age: 25-34	-0.827*** (0.171)	4.907*** (0.194)	2.655*** (0.139)	-2.391*** (0.106)	0.678*** (0.198)	1.211*** (0.078)	-0.650*** (0.105)	-5.583*** (0.182)
Age: 35-44	-0.470*** (0.172)	6.558*** (0.194)	2.182*** (0.139)	-2.973*** (0.107)	-0.891*** (0.197)	2.073*** (0.081)	-0.366*** (0.107)	-6.113*** (0.178)
Age: 45-54	-1.026*** (0.174)	6.331*** (0.195)	1.641*** (0.140)	-3.490*** (0.108)	-0.286 (0.198)	3.171*** (0.084)	-0.855*** (0.108)	-5.486*** (0.184)
Age: 55-64	-1.566*** (0.179)	6.946*** (0.202)	2.243*** (0.145)	-3.814*** (0.111)	-1.177*** (0.205)	5.134*** (0.096)	-1.080*** (0.113)	-6.686*** (0.186)
Age: 65-74	-2.158*** (0.184)	7.512*** (0.210)	2.257*** (0.152)	-4.227*** (0.113)	-3.870*** (0.212)	9.470*** (0.108)	-1.963*** (0.115)	-7.019*** (0.187)
Age: 75+	-3.785*** (0.187)	11.067*** (0.226)	3.298*** (0.160)	-5.153*** (0.113)	-7.841*** (0.212)	12.832*** (0.124)	-3.356*** (0.114)	-7.061*** (0.189)
Ethnicity: White	-0.120 (0.095)	-0.994*** (0.121)	-3.263*** (0.089)	-1.075*** (0.055)	2.028*** (0.123)	1.748*** (0.063)	1.288*** (0.052)	0.388*** (0.057)
Region: Northeast	0.804*** (0.085)	3.156*** (0.114)	-0.353*** (0.086)	0.419*** (0.049)	-1.991*** (0.119)	-1.415*** (0.070)	-0.383*** (0.058)	-0.237*** (0.069)
Region: South	0.933*** (0.072)	0.209** (0.091)	0.395*** (0.073)	-0.236*** (0.039)	0.412*** (0.105)	-0.261*** (0.064)	-0.696*** (0.050)	-0.755*** (0.052)
Region: West	-0.174** (0.078)	3.872*** (0.104)	-1.518*** (0.079)	-0.024 (0.042)	-0.313*** (0.113)	-1.012*** (0.067)	-0.800*** (0.054)	-0.032 (0.062)
Urban: yes	-0.055 (0.100)	4.988*** (0.114)	-0.518*** (0.105)	0.388*** (0.051)	-3.359*** (0.152)	-1.669*** (0.096)	-0.338*** (0.071)	0.561*** (0.051)
Edu.: college	-3.789*** (0.115)	0.929*** (0.158)	-0.591*** (0.120)	0.684*** (0.061)	0.443*** (0.166)	0.136 (0.102)	0.354*** (0.077)	1.835*** (0.080)
Edu.: high school	-3.002*** (0.091)	-0.466*** (0.114)	-0.682*** (0.083)	0.242*** (0.042)	1.991*** (0.118)	0.378*** (0.074)	0.512*** (0.053)	1.028*** (0.034)
HH size	0.651*** (0.022)	-1.265*** (0.027)	0.230*** (0.020)	0.185*** (0.012)	0.496*** (0.029)	0.014 (0.015)	-0.296*** (0.013)	-0.014 (0.014)
Renter: yes	1.116*** (0.072)	8.230*** (0.094)	-3.748*** (0.066)	-0.199*** (0.041)	-3.051*** (0.093)	-1.361*** (0.053)	-0.463*** (0.045)	-0.524*** (0.053)
Income: 21-40th	-1.524*** (0.096)	-1.773*** (0.125)	0.864*** (0.087)	-0.066 (0.049)	1.532*** (0.121)	1.284*** (0.075)	0.526*** (0.057)	-0.843*** (0.067)
Income: 41-60th	-2.987*** (0.088)	-2.988*** (0.116)	0.147* (0.083)	0.052 (0.047)	4.829*** (0.120)	1.478*** (0.071)	0.767*** (0.056)	-1.299*** (0.060)
Income: 61-80th	-3.799*** (0.088)	-3.558*** (0.115)	-0.013 (0.086)	0.297*** (0.049)	5.831*** (0.124)	0.721*** (0.071)	1.290*** (0.059)	-0.769*** (0.064)
Income: 81-100th	-4.624*** (0.093)	-3.068*** (0.124)	0.302*** (0.098)	1.002*** (0.054)	4.695*** (0.136)	-0.454*** (0.077)	1.801*** (0.066)	0.346*** (0.076)
Time x Age: 25-34	-0.090*** (0.018)	-0.050*** (0.019)	-0.028* (0.015)	0.081*** (0.009)	-0.010 (0.019)	0.040*** (0.009)	0.043*** (0.010)	0.014 (0.020)
Time x Age: 35-44	-0.129*** (0.019)	-0.095*** (0.019)	-0.005 (0.015)	0.101*** (0.009)	0.025 (0.019)	0.037*** (0.009)	0.048*** (0.011)	0.017 (0.019)
Time x Age: 45-54	-0.155*** (0.019)	-0.082*** (0.019)	-0.023 (0.015)	0.109*** (0.010)	0.007 (0.019)	0.026*** (0.009)	0.070*** (0.011)	0.048** (0.020)
Time x Age: 55-64	-0.174*** (0.019)	-0.062*** (0.020)	-0.044*** (0.015)	0.112*** (0.010)	0.020 (0.019)	0.030*** (0.010)	0.067*** (0.011)	0.051** (0.020)
Time x Age: 65-74	-0.203*** (0.020)	-0.050** (0.020)	-0.069*** (0.015)	0.124*** (0.010)	0.051*** (0.020)	0.020* (0.010)	0.104*** (0.011)	0.023 (0.021)
Time x Age: 75+	-0.204*** (0.020)	-0.048** (0.022)	-0.123*** (0.016)	0.153*** (0.010)	0.073*** (0.020)	0.001 (0.012)	0.123*** (0.011)	0.024 (0.021)

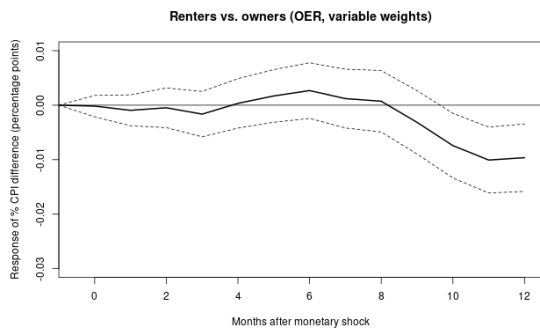
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	<i>Dependent variable:</i>							
	Food (1)	Housing (2)	H'hold exp. (3)	Clothing (4)	Transportation (5)	Health (6)	Entertainment (7)	Education (8)
Time x Ethnicity: White	0.023*** (0.009)	0.080*** (0.011)	0.080*** (0.008)	0.027*** (0.005)	-0.148*** (0.011)	-0.024*** (0.006)	-0.036*** (0.005)	-0.003 (0.006)
Time x Region: Northeast	-0.048*** (0.008)	0.032*** (0.010)	0.001 (0.008)	-0.011*** (0.004)	0.038*** (0.010)	-0.029*** (0.007)	-0.011** (0.005)	0.029*** (0.007)
Time x Region: South	0.003 (0.007)	0.040*** (0.008)	-0.030*** (0.007)	-0.003 (0.003)	0.023** (0.009)	-0.049*** (0.006)	0.001 (0.005)	0.015*** (0.005)
Time x Region: West	0.002 (0.007)	0.105*** (0.009)	0.004 (0.007)	-0.008** (0.003)	-0.024** (0.010)	-0.069*** (0.006)	0.002 (0.005)	-0.012** (0.006)
Time x Urban: yes	-0.031*** (0.010)	0.123*** (0.011)	-0.066*** (0.010)	-0.012*** (0.004)	0.041*** (0.014)	0.009 (0.009)	-0.062*** (0.007)	-0.003 (0.005)
Time x Edu.: college	-0.006 (0.011)	0.051*** (0.014)	-0.015 (0.011)	-0.036*** (0.005)	-0.052*** (0.014)	0.070*** (0.009)	-0.013* (0.007)	0.001 (0.007)
Time x Edu.: high school	0.008 (0.009)	0.029*** (0.011)	0.011 (0.008)	-0.026*** (0.004)	-0.055*** (0.011)	0.058*** (0.007)	-0.010* (0.005)	-0.014*** (0.004)
Time x HH size	-0.014*** (0.002)	-0.009*** (0.002)	0.013*** (0.002)	-0.001 (0.001)	0.003 (0.003)	0.002 (0.001)	0.001 (0.001)	0.005*** (0.001)
Time x Renter: yes	-0.099*** (0.007)	0.168*** (0.008)	-0.042*** (0.006)	0.019*** (0.003)	0.015* (0.008)	-0.033*** (0.005)	-0.028*** (0.004)	0.001 (0.005)
Time x Income: 21-40th	0.008 (0.009)	-0.032*** (0.012)	0.040*** (0.008)	0.014*** (0.004)	-0.016 (0.011)	-0.053*** (0.007)	0.017*** (0.005)	0.020*** (0.007)
Time x Income: 41-60th	0.015* (0.008)	-0.043*** (0.011)	0.047*** (0.008)	0.008** (0.004)	-0.052*** (0.011)	0.006 (0.007)	0.0001 (0.005)	0.019*** (0.006)
Time x Income: 61-80th	0.017** (0.008)	-0.035*** (0.011)	0.023*** (0.008)	-0.004 (0.004)	-0.069*** (0.011)	0.096*** (0.007)	-0.015*** (0.005)	-0.013** (0.006)
Time x Income: 81-100th	0.014 (0.008)	-0.009 (0.011)	-0.032*** (0.008)	-0.025*** (0.004)	-0.050*** (0.011)	0.132*** (0.007)	-0.012** (0.006)	-0.018*** (0.007)
Constant	22.758*** (0.265)	16.031*** (0.295)	18.026*** (0.227)	7.831*** (0.154)	17.635*** (0.310)	2.625*** (0.167)	8.240*** (0.162)	6.854*** (0.226)
Observations	560,369	560,369	560,369	560,369	560,369	560,369	560,369	560,369
R ²	0.067	0.204	0.061	0.074	0.087	0.202	0.033	0.055
Adjusted R ²	0.067	0.204	0.061	0.074	0.087	0.202	0.033	0.055

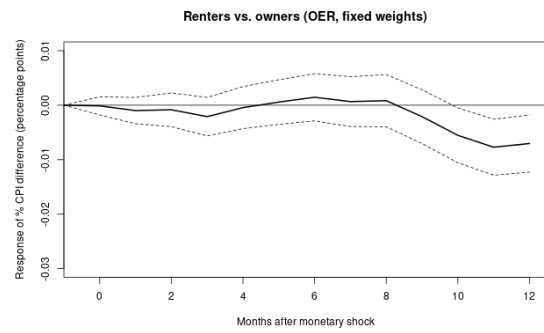
Note:

*p<0.1; **p<0.05; ***p<0.01

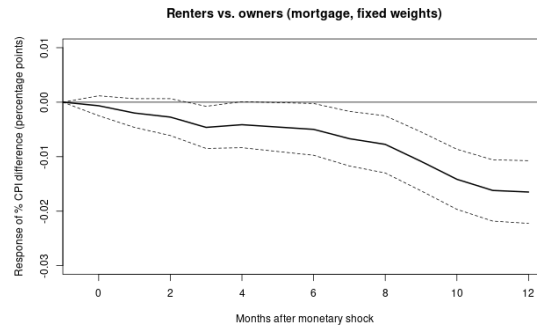
2 Figures



(a) OER, variable weights

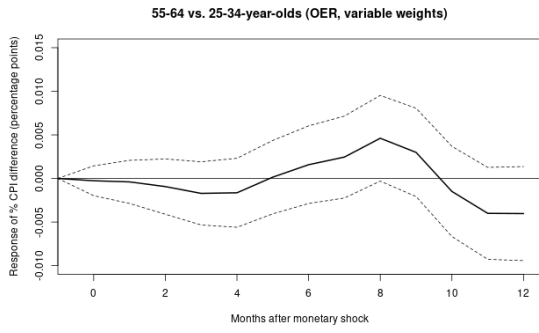


(b) OER, fixed weights

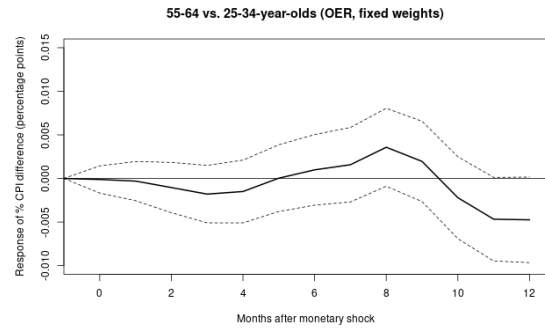


(c) Mortgage-based, fixed weights

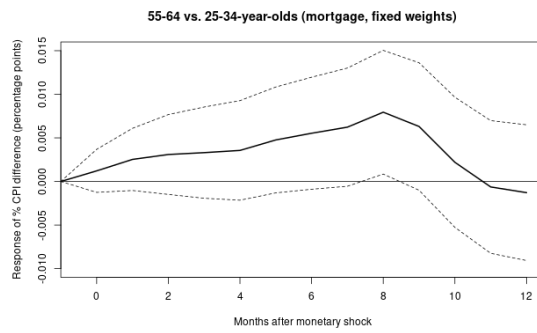
Figure 1: Impulse response of renter/owner CPI ratios to monetary policy



(a) OER, variable weights

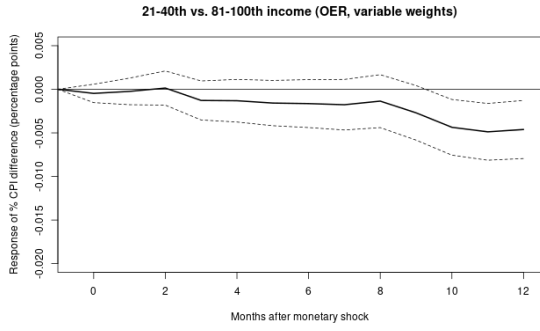


(b) OER, fixed weights

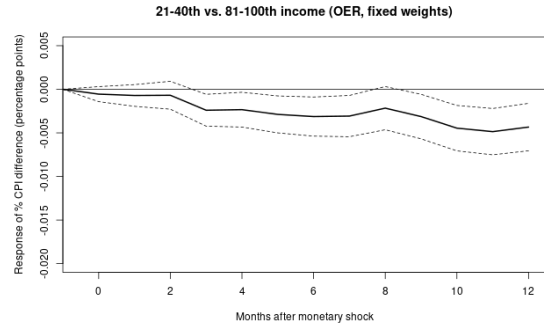


(c) Mortgage-based, fixed weights

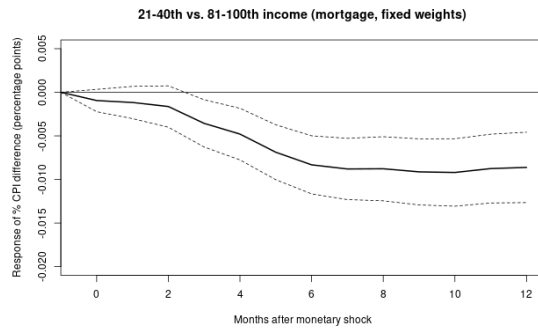
Figure 2: Impulse response of age-related CPI ratios to monetary policy



(a) OER, variable weights

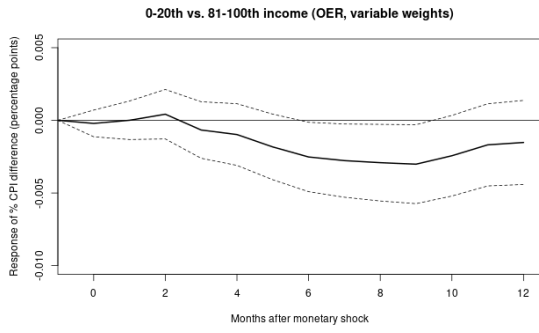


(b) OER, fixed weights

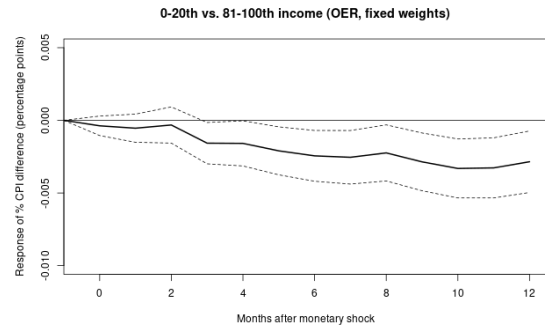


(c) Mortgage-based, fixed weights

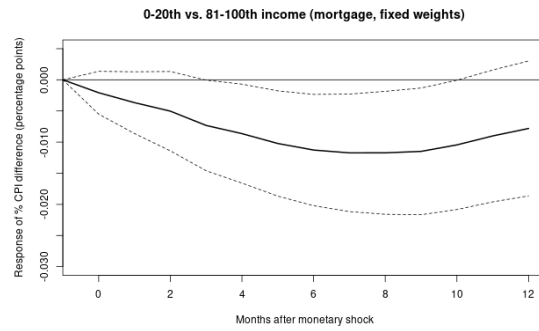
Figure 3: Impulse response of low-middle to high-income CPI ratios to monetary policy



(a) OER, variable weights



(b) OER, fixed weights



(c) Mortgage-based, fixed weights

Figure 4: Impulse response of low to high-income CPI ratios to monetary policy