

Online Appendix to “The Effect of Unconventional Monetary Policy on Credit Flows”

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Table 1: Macroeconomic Data and Loadings on Factors and Monetary Policy Rate

	Source	Transformation			Loadings			Monetary policy rate
		Factor 1	Factor 2	Factor 3	Factor 1	Factor 2	Factor 3	
Real output: and income								
1. Industrial production: Total index	Federal Reserve Board (G.17)	log difference	1.52	0.95	-0.43	0.00	0.00	0.00
2. Industrial production: Final Products	Federal Reserve Board (G.17)	log difference	1.54	0.69	-0.26	0.00	0.00	0.00
3. Industrial production: Final Products: Consumer goods	Federal Reserve Board (G.17)	log difference	1.11	0.81	0.01	0.00	0.00	0.00
4. Industrial production: Final Products: Consumer goods: Durable	Federal Reserve Board (G.17)	log difference	1.02	0.96	-0.40	0.00	0.00	0.00
5. Industrial production: Final Products: Consumer goods: Nondurable	Federal Reserve Board (G.17)	log difference	0.85	0.29	0.36	0.00	0.00	0.00
6. Industrial production: Final Products: Equipment, total: Business equipment	Federal Reserve Board (G.17)	log difference	1.54	0.59	-0.40	0.00	0.00	0.00
7. Industrial production: Materials	Federal Reserve Board (G.17)	log difference	1.38	1.06	-0.56	0.00	0.00	0.00
8. Industrial production: Materials: Non-energy: Durable	Federal Reserve Board (G.17)	log difference	1.40	1.03	-0.45	0.00	0.00	0.00
9. Industrial production: Materials: Non-energy: Nondurable	Federal Reserve Board (G.17)	log difference	1.16	0.72	-0.52	0.00	0.00	0.00
10. Industrial production: Manufacturing	Federal Reserve Board (G.17)	log difference	1.52	0.93	-0.35	0.00	0.00	0.00
11. Industrial production: Final Products: Equipment, total: Oil and gas well drilling and manufactured homes	Federal Reserve Board (G.17)	log difference	0.67	0.03	-0.83	0.00	0.00	0.00
12. Industrial production: Final Products: Consumer goods: Nondurable: Energy: Residential utilities	Federal Reserve Board (G.17)	log difference	-0.01	-0.08	0.17	0.00	0.00	0.00
13. Industrial production: Total Index	Federal Reserve Board (G.17)	log difference	1.52	0.95	-0.43	0.00	0.00	0.00
14. Capacity utilization: Manufacturing, percent of total industry	Federal Reserve Board (G.17)	-	1.28	-0.57	1.07	0.00	0.00	0.00
15. Purchasing managers' index	ISM	-	1.38	1.10	-0.67	0.00	0.00	0.00
16. NAPM index	ISM	-	1.27	1.18	-0.76	0.00	0.00	0.00
17. Personal income	Bureau of Economic Analysis	log difference	1.26	-0.72	-0.39	0.00	0.00	0.00
18. Personal income less transfer payments	Bureau of Economic Analysis	log difference	1.05	0.69	0.53	0.00	0.00	0.00
Hours and employment								
19. Employment level	Bureau of Labor Statistics	log difference	1.56	0.53	0.26	0.00	0.00	0.00
20. Employment level, nonagricultural industries	Bureau of Labor Statistics	log difference	1.57	0.50	0.27	0.00	0.00	0.00
21. Civilian unemployment rate	Bureau of Labor Statistics	-	-0.13	0.24	-1.98	0.00	0.00	0.00
22. Average duration of unemployment, in weeks	Bureau of Labor Statistics	-	-0.51	1.55	-1.58	0.00	0.00	0.00
23. Number of unemployed: Less than 5 weeks	Bureau of Labor Statistics	-	-0.29	-1.01	0.07	0.00	0.00	0.00
24. Number of unemployed: 5 to 14 weeks	Bureau of Labor Statistics	-	-1.19	0.47	-1.38	0.00	0.00	0.00
25. Number of unemployed: 15 weeks and over	Bureau of Labor Statistics	-	-0.74	1.22	-2.07	0.00	0.00	0.00
26. Number of unemployed: 15 to 26 weeks	Bureau of Labor Statistics	-	-1.01	0.93	-1.88	0.00	0.00	0.00
27. All employees, thousands: Total nonfarm	Bureau of Labor Statistics	log difference	1.71	0.59	0.28	0.00	0.00	0.00
28. All employees, thousands: Total private	Bureau of Labor Statistics	log difference	1.69	0.68	0.13	0.00	0.00	0.00
29. All employees, thousands: Goods-producing	Bureau of Labor Statistics	log difference	1.60	0.87	-0.07	0.00	0.00	0.00
30. All employees, thousands: Mining and logging: Mining	Bureau of Labor Statistics	log difference	0.51	-0.23	-0.85	0.00	0.00	0.00
31. All employees, thousands: Construction	Bureau of Labor Statistics	log difference	1.38	0.86	0.70	0.00	0.00	0.00
32. All employees, thousands: Manufacturing	Bureau of Labor Statistics	log difference	1.56	0.85	-0.38	0.00	0.00	0.00
33. All employees, thousands: Durable goods	Bureau of Labor Statistics	log difference	1.57	0.86	-0.30	0.00	0.00	0.00
34. All employees, thousands: Nondurable goods	Bureau of Labor Statistics	log difference	1.33	0.72	-0.54	0.00	0.00	0.00
35. All employees, thousands: Service-providing	Bureau of Labor Statistics	log difference	1.66	1.10	0.50	0.00	0.00	0.00
36. All employees, thousands: Trade, transportation, and utilities	Bureau of Labor Statistics	log difference	1.66	0.37	0.06	0.00	0.00	0.00
37. All employees, thousands: Wholesale trade	Bureau of Labor Statistics	log difference	1.62	0.13	-0.07	0.00	0.00	0.00
38. All employees, thousands: Retail trade	Bureau of Labor Statistics	log difference	1.54	0.25	0.07	0.00	0.00	0.00
39. All employees, thousands: Government	Bureau of Labor Statistics	log difference	0.31	-0.58	1.08	0.00	0.00	0.00
40. Average weekly hours of production and nonsupervisory employees: Manufacturing	Bureau of Labor Statistics	-	0.37	1.61	0.33	0.00	0.00	0.00
41. Average weekly overtime hours of production and nonsupervisory employees: Manufacturing	Bureau of Labor Statistics	-	0.33	1.36	0.94	0.00	0.00	0.00
42. NAPM employment index	ISM	-	1.21	1.03	-1.05	0.00	0.00	0.00

	Source	Transformation			Loadings			Monetary policy rate
		Factor 1	Factor 2	Factor 3	Factor 1	Factor 2	Factor 3	
Consumption								
43. Personal consumption expenditures	Bureau of Economic Analysis	log difference	1.29	-0.88	-0.53	0.00		
44. Personal consumption expenditures: Durable goods	Bureau of Economic Analysis	log difference	0.75	0.25	-0.17	0.00		
45. Personal consumption expenditures: Nondurable goods	Bureau of Economic Analysis	log difference	1.09	-0.79	-1.45	0.00		
46. Personal consumption expenditures: Services	Bureau of Economic Analysis	log difference	1.01	-1.26	0.03	0.00		
Housing starts and sales								
47. New privately-owned housing units started, thousands: United States: Total	Census Bureau	log	1.24	-0.38	1.86	0.38		
48. New privately-owned housing units started, thousands: Northeast: Total	Census Bureau	log	1.10	-0.61	1.56	0.44		
49. New privately-owned housing units started, thousands: Midwest: Total	Census Bureau	log	1.16	-0.46	1.57	0.31		
50. New privately-owned housing units started, thousands: South: Total	Census Bureau	log	1.11	-0.22	1.79	0.34		
51. New privately-owned housing units started, thousands: West: Total	Census Bureau	log	1.23	-0.33	1.88	0.34		
52. New privately-owned housing units authorized in permit-issuing places, thousands: Total	Census Bureau	log	1.10	-0.06	1.82	0.23		
53. Shipments of new manufactured homes	Census Bureau	log	1.02	-1.04	1.54	0.71		
Real inventories, orders, and unfilled orders								
54. NAPM inventories index	ISM	-	1.03	0.54	-0.51	-0.13		
55. NAPM new orders index	ISM	-	1.24	1.21	-0.63	-0.27		
56. NAPM supplier deliveries index	ISM	-	0.93	0.68	-0.30	-0.13		
57. New orders (net): Consumer goods and materials	Census Bureau	log difference	0.74	0.81	-0.44	-0.13		
58. New orders: Nondefense capital goods	Census Bureau	log difference	0.80	0.66	-0.54	-0.10		
Stock prices								
59. S&P common stock price index: Composite	S&P Dow Jones Indices	log difference	0.07	0.15	-0.37	-0.05		
60. S&P common stock price index: Industrials	S&P Dow Jones Indices	log difference	0.03	0.15	-0.35	-0.05		
Exchange rates								
61. Foreign exchange rate: United Kingdom	Federal Reserve Board (H.10)	log difference	0.19	-0.03	-0.16	-0.05		
62. Foreign exchange rate: Canada	Federal Reserve Board (H.10)	log difference	-0.16	0.13	0.83	0.00		
Interest rates								
63. 3-month Treasury yield	Federal Reserve Board (H.15)	-	0.72	-1.69	0.50	0.99		
64. 6-month Treasury yield	Federal Reserve Board (H.15)	-	0.73	-1.69	0.51	0.99		
65. 1-year Treasury yield	Federal Reserve Board (H.15)	-	0.74	-1.66	0.50	0.98		
66. 5-year Treasury yield	Federal Reserve Board (H.15)	-	0.70	-1.55	0.46	0.95		
67. 10-year Treasury yield	Federal Reserve Board (H.15)	-	0.66	-1.50	0.34	0.92		
68. 3-month Treasury yield less effective federal funds rate	Federal Reserve Board (H.15)	-	-0.34	1.81	-0.75	-0.86		
69. 6-month Treasury yield less effective federal funds rate	Federal Reserve Board (H.15)	-	-0.31	1.80	-0.71	-0.86		
70. 1-year Treasury yield less effective federal funds rate	Federal Reserve Board (H.15)	-	-0.11	1.63	-0.70	-0.69		
71. 5-year Treasury yield less effective federal funds rate	Federal Reserve Board (H.15)	-	-0.32	1.61	-0.61	-0.72		
72. 10-year Treasury yield less effective federal funds rate	Federal Reserve Board (H.15)	-	-0.44	1.64	-0.78	-0.78		
Money and credit quantity aggregates								
73. Commercial Bank Assets: Bank credit: Loans and leases in bank credit: Commercial and industrial loans	Federal Reserve Board (H.8)	log difference	0.18	-0.10	0.79	0.14		
74. Consumer credit outstanding: Nonrevolving: Total	Federal Reserve Board (G.10)	log difference	1.16	0.00	0.82	0.26		
75. Money stock measure: M1	Federal Reserve Board (H.6)	log difference	-0.50	0.29	-0.82	-0.21		
76. Money stock measure: M2	Federal Reserve Board (H.6)	log difference	-0.10	-0.45	0.23	0.17		
77. Monetary base: Total	Federal Reserve Board (H.3)	log difference	-0.78	0.17	0.21	-0.14		
78. M2 - money supply - M1 + savings deposits, small time deposits, and MMMFs	Federal Reserve Board (H.6)	log difference	-0.10	-0.45	0.23	0.17		

	Source	Transformation	Loadings			Monetary policy rate
			Factor 1	Factor 2	Factor 3	
Price indexes						
79. NAPM commodity price index	ISM	-	0.84	-0.88	-1.78	0.27
80. Producer price index: All commodities	Bureau of Labor Statistics	log difference	0.69	-1.27	-1.76	0.00
81. Producer price index: Finished consumer goods	Bureau of Labor Statistics	log difference	0.70	-1.09	-1.82	0.00
82. Producer price index: Intermediate material supplies and components	Bureau of Labor Statistics	log difference	0.86	-0.95	-1.68	0.00
83. Producer price index: Crude materials	Bureau of Labor Statistics	log difference	0.74	-0.27	-1.53	0.00
84. Consumer price index: All items	Bureau of Labor Statistics	log difference	0.78	-1.70	-1.25	0.00
85. Consumer price index: Apparel and upkeep	Bureau of Labor Statistics	log difference	0.45	-1.09	-1.08	0.00
86. Consumer price index: Transportation	Bureau of Labor Statistics	log difference	0.78	-0.89	-1.91	0.00
87. Consumer price index: Medical care	Bureau of Labor Statistics	log difference	0.32	-1.76	-0.30	0.00
88. Consumer price index: Commodities	Bureau of Labor Statistics	log difference	0.81	-1.31	-1.75	0.00
89. Consumer price index: Durables	Bureau of Labor Statistics	log difference	0.55	-1.45	-1.09	0.00
90. Consumer price index: Services	Bureau of Labor Statistics	log difference	0.56	-1.75	-0.40	0.00
91. Consumer price index: All items less food	Bureau of Labor Statistics	log difference	0.76	-1.68	-1.30	0.00
92. Consumer price index: All items less shelter	Bureau of Labor Statistics	log difference	0.79	-1.55	-1.59	0.00
93. Consumer price index: All items less medical care	Bureau of Labor Statistics	log difference	0.79	-1.67	-1.29	0.00
Average hourly earnings						
94. Avg. hourly earnings of all employees on private nonfarm payrolls: Total private: Goods-producing: Construction	Bureau of Labor Statistics	log difference	0.11	-1.44	-0.21	0.00
95. Avg. hourly earnings of all employees on private nonfarm payrolls: Total private: Goods-producing: Manufacturing	Bureau of Labor Statistics	log difference	0.59	-1.48	-0.50	0.00
Miscellaneous						
96. Business cycle indicator, consumer expectations	University of Michigan	-	0.74	0.92	1.86	-0.08
Credit flows						
97. Credit destruction	-	-	0.14	0.39	1.53	0.00
98. Credit creation	-	-	0.21	0.08	1.58	0.00