Factor Models and Structural Vector Autoregressions in Macroeconomics

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−- **Data Appendix** −-

Table A.1 below lists the 207 data series used in Sections 6 and 7. The data series can be found in the Excel file *hom_fac_1.xlsx* in the replication materials. Unless otherwise noted in Table A.1 or *hom_fac_1.xlsx*, the data were downloaded from FRED. We carried out several transformations in the order listed below.

Seasonal Adjustment: Many of the series were seasonally adjusted at the source, but a few were not and yet showed substantial seasonality. We seasonally adjusted these series using the X-11 feature in RATS. Where applicable, this is noted in the series description in Table A.1.

The results Sections 6 and 7 were computed using a series of Matlab programs available in the replication materials. The data are input from the Excel file into Matlab using the programs *datain_all.m* and *datain_real.m*. These programs carry out the following transformations.

Price Deflation: Many of the nominal series were deflated using the price deflator for person consumption expenditures (PCE) or PCE less food and energy (core-PCE). Where applicable, this is noted in the series description in Table A.1.

Temporal Aggregation: Many of the series were available monthly, and these series were converted to quarterly values by averaging the quarter's three monthly values. (See the program *mtoq.m* in the replication files.)

Logs, Differences, etc.: The series were converted to first differences, growth rates, etc. using the transformation listed in the column labeled "T" in Table A.1. (See the program *transx.m* in the replication files.) Letting x denote the original series and y denote the transformed series these transformations are: (1) $y_t = x_t$, (2) $y_t = (1\text{-}L)x_t$, (3) $y_t = (1\text{-}L)^2 x_t$, (4) $y_t = \ln(x_t)$, (5) $y_t = (1\text{-}L)\ln(x_t)$, (6) $y_t = (1\text{-}L)^2\ln(x_t)$.

Outliers: Some series were examined for outliers. These series are indicated by a non-zero value in the column labeled "O" on the table. Outliers were defined as values satisfying $|y_t - m|/iqr > \kappa$, where m is the sample median, *iqr* is the sample interquartile

1

range, and κ is a parameter. Series with O = 1 in the table used $\kappa = 4.5$, and series with O=2 used $\kappa = 3$. Outliers were replaced with the median of the 5 preceding observations. (See the program *adjout.m* in the replication files.)

Table A.1: Data Series

	Name	Description	Sample Period	T	O	F
		(1) NIPA				
1	GDP	Real Gross Domestic Product 3 Decimal	1959:Q1-2014:Q4	5	0	0
2	Consumption	Real Personal Consumption Expenditures	1959:Q1-2014:Q4	5	0	0
3	Cons:Dur	Real Personal Consumption Expenditures: Durable Goods Quantity Index	1959:Q1-2014:Q4	5	0	1
4	Cons:Svc	Real Personal Consumption Expenditures: Services Quantity Index	1959:Q1-2014:Q4	5	0	1
5	Cons:NonDur	Real Personal Consumption Expenditures: Nondurable Goods Quantity Index	1959:Q1-2014:Q4	5	0	1
6	Investment	Real Gross Private Domestic Investment 3 Decimal	1959:Q1-2014:Q4	5	0	0
7	FixedInv	Real Private Fixed Investment Quantity Index	1959:Q1-2014:Q4	5	0	0
8	Inv:Equip	Real Nonresidential Investment: Equipment Quantity Idenx	1959:Q1-2014:Q4	5	0	1
9	FixInv:NonRes	Real Private Nonresidential Fixed Investment Quantity Index	1959:Q1-2014:Q4	5	0	1
10	FixedInv:Res	Real Private Residential Fixed Investment Quantity Index	1959:Q1-2014:Q4	5	0	1
11	Ch. Inv /GDP	Change in Inventories /GDP	1959:Q1-2014:Q4	1	0	1
12	Gov.Spending	Real Government Consumption Expenditures & Gross Investment 3 Decimal	1959:Q1-2014:Q4	5	0	0
13	Gov:Fed	Real Federal Consumption Expenditures Quantity Index	1959:Q1-2014:Q4	5	0	1
14	Real_Gov Receipts	Government Current Receipts (Nominal) Defl by GDP Deflator	1959:Q1-2014:Q3	5	0	1
15	Gov:State&Local	Real State & Local Consumption Expenditures Quantity Index	1959:Q1-2014:Q4	5	0	1
16	Exports	Real Exports of Goods & Services 3 Decimal	1959:Q1-2014:Q4	5	0	1
17	Imports	Real Imports of Goods & Services 3 Decimal	1959:Q1-2014:Q4	5	0	1
18	Disp-Income	Real Disposable Personal Income	1959:Q1-2014:Q4	5	0	0
19	Ouput:NFB	Nonfarm Business Sector: Output	1959:Q1-2014:Q4	5	0	0
20	Output:Bus	Business Sector: Output	1959:Q1-2014:Q4	5	0	0
		(2) Industrial Production				
21	IP: Total index	IP: Total index	1959:Q1-2014:Q4	5	0	0
22	IP: Final products	Industrial Production: Final Products (Market Group)	1959:Q1-2014:Q4	5	0	0
23	IP: Consumer goods	IP: Consumer goods	1959:Q1-2014:Q4	5	0	0
24	IP: Materials	Industrial Production: Materials	1959:Q1-2014:Q4	5	0	0
25	IP: Dur gds materials	Industrial Production: Durable Materials	1959:Q1-2014:Q4	5	0	1
26	IP: Nondur gds materials	Industrial Production: nondurable Materials	1959:Q1-2014:Q4	5	0	1
27	IP: Dur Cons. Goods	Industrial Production: Durable Consumer Goods	1959:Q1-2014:Q4	5	0	1
28	IP: Auto	IP: Automotive products	1959:Q1-2014:Q4	5	0	1
29	IP:NonDur Cons God	Industrial Production: Nondurable Consumer Goods	1959:Q1-2014:Q4	5	0	1

30	IP: Bus Equip	Industrial Production: Business Equipment	1959:Q1-2014:Q4	5	0	1
31	Capu Tot	Capacity Utilization: Total Industry	1967:Q1-2014:Q4	1	0	1
		(3) Employment and Unemployment				
32	Emp:Nonfarm	Total Nonfarm Payrolls: All Employees	1959:Q1-2014:Q4	5	0	0
33	Emp: Private	All Employees: Total Private Industries	1959:Q1-2014:Q4	5	0	0
34	Emp: mfg	All Employees: Manufacturing	1959:Q1-2014:Q4	5	0	0
35	Emp:Services	All Employees: Service-Providing Industries	1959:Q1-2014:Q4	5	0	0
36	Emp:Goods	All Employees: Goods-Producing Industries	1959:Q1-2014:Q4	5	0	0
37	Emp: DurGoods	All Employees: Durable Goods Manufacturing	1959:Q1-2014:Q4	5	0	1
38	Emp: Nondur Goods	All Employees: Nondurable Goods Manufacturing	1959:Q1-2014:Q4	5	0	0
39	Emp: Const	All Employees: Construction	1959:Q1-2014:Q4	5	0	1
40	Emp: Edu&Health	All Employees: Education & Health Services	1959:Q1-2014:Q4	5	0	1
41	Emp: Finance	All Employees: Financial Activities	1959:Q1-2014:Q4	5	0	1
42	Emp: Infor	All Employees: Information Services	1959:Q1-2014:Q4	5	1	1
43	Emp: Bus Serv	All Employees: Professional & Business Services	1959:Q1-2014:Q4	5	0	1
44	Emp:Leisure	All Employees: Leisure & Hospitality	1959:Q1-2014:Q4	5	0	1
45	Emp:OtherSvcs	All Employees: Other Services	1959:Q1-2014:Q4	5	0	1
46	Emp: Mining/NatRes	All Employees: Natural Resources & Mining	1959:Q1-2014:Q4	5	1	1
47	Emp:Trade&Trans	All Employees: Trade Transportation & Utilities	1959:Q1-2014:Q4	5	0	1
48	Emp: Gov	All Employees: Government	1959:Q1-2014:Q4	5	0	0
49	Emp:Retail	All Employees: Retail Trade	1959:Q1-2014:Q4	5	0	1
50	Emp:Wholesal	All Employees: Wholesale Trade	1959:Q1-2014:Q4	5	0	1
51	Emp: Gov(Fed)	Employment Federal Government	1959:Q1-2014:Q4	5	2	1
52	Emp: Gov (State)	Employment State government	1959:Q1-2014:Q4	5	0	1
53	Emp: Gov (Local)	Employment Local government	1959:Q1-2014:Q4	5	0	1
54	Emp: Total (HHSurve)	Emp Total (Household Survey)	1959:Q1-2014:Q4	5	0	0
55	LF Part Rate	LaborForce Participation Rate (16 Over) SA	1959:Q1-2014:Q4	2	0	0
56	Unemp Rate	Urate	1959:Q1-2014:Q4	2	0	0
57	Urate_ST	Urate Short Term (< 27 weeks)	1959:Q1-2014:Q4	2	0	0
58	Urate_LT	Urate Long Term (>= 27 weeks)	1959:Q1-2014:Q4	2	0	0
59	Urate: Age16-19	Unemployment Rate - 16-19 yrs	1959:Q1-2014:Q4	2	0	1
60	Urate:Age>20 Men	Unemployment Rate - 20 yrs. & over Men	1959:Q1-2014:Q4	2	0	1
61	Urate: Age>20 Women	Unemployment Rate - 20 yrs. & over Women	1959:Q1-2014:Q4	2	0	1
62	U: Dur<5wks	Number Unemployed for Less than 5 Weeks	1959:Q1-2014:Q4	5	0	1
63	U:Dur5-14wks	Number Unemployed for 5-14 Weeks	1959:Q1-2014:Q4	5	0	1

64	U:dur>15-26wks	Civilians Unemployed for 15-26 Weeks	1959:Q1-2014:Q4	5	0	1
65	U: Dur>27wks	Number Unemployed for 27 Weeks & over	1959:Q1-2014:Q4	5	0	1
66	U: Job losers	Unemployment Level - Job Losers	1967:Q1-2014:Q4	5	0	1
67	U: LF Reenty	Unemployment Level - Reentrants to Labor Force	1967:Q1-2014:Q4	5	1	1
68	U: Job Leavers	Unemployment Level - Job Leavers	1967:Q1-2014:Q4	5	0	1
69	U: New Entrants	Unemployment Level - New Entrants	1967:Q1-2014:Q4	5	1	1
70	Emp:SlackWk	Employment Level - Part-Time for Economic Reasons All Industries	1959:Q1-2014:Q4	5	1	1
71	EmpHrs:Bus Sec	Business Sector: Hours of All Persons	1959:Q1-2014:Q4	5	0	0
72	EmpHrs:nfb	Nonfarm Business Sector: Hours of All Persons	1959:Q1-2014:Q4	5	0	0
73	AWH Man	Average Weekly Hours: Manufacturing	1959:Q1-2014:Q4	1	0	1
74	AWH Privat	Average Weekly Hours: Total Private Industry	1964:Q1-2014:Q4	2	0	1
75	AWH Overtime	Average Weekly Hours: Overtime: Manufacturing	1959:Q1-2014:Q4	2	0	1
76	HelpWnted	Index of Help-Wanted Advertising in Newspapers (Data truncated in 2000)	1959:Q1-1999:Q4	1	0	0
	(4) Orders, Inventories, and Sales					
77	MT Sales	Manufacturing and trade sales (mil. Chain 2005 $)	1959:Q1-2014:Q3	5	0	0
78	Ret. Sale	Sales of retail stores (mil. Chain 2000 $)	1959:Q1-2014:Q3	5	0	1
79	Orders (DurMfg)	Mfrs' new orders durable goods industries (bil. chain 2000 $)	1959:Q1-2014:Q4	5	0	1
80	Orders (Cons. Gds & Mat.)	Mfrs' new orders consumer goods and materials (mil. 1982 $)	1959:Q1-2014:Q4	5	0	1
81	UnfOrders(DurGds)	Mfrs' unfilled orders durable goods indus. (bil. chain 2000 $)	1959:Q1-2014:Q4	5	0	1
82	Orders(NonDefCap)	Mfrs' new orders nondefense capital goods (mil. 1982 $)	1959:Q1-2014:Q4	5	0	1
83	VendPerf	ISM Manufacturing: Supplier Deliveries Index©	1959:Q1-2014:Q4	1	0	1
84	NAPM:INV	ISM Manufacturing: Inventories Index©	1959:Q1-2014:Q4	1	0	1
85	NAPM:ORD	ISM Manufacturing: New Orders Index©; Index;	1959:Q1-2014:Q4	1	0	1
86	MT Invent	Manufacturing and trade inventories (bil. Chain 2005 $)	1959:Q1-2014:Q3	5	0	1
	(5) Housing Starts and Permits					
87	Hstarts	Housing Starts: Total: New Privately Owned Housing Units Started	1959:Q1-2014:Q3	5	0	0
88	Hstarts >5units	Privately Owned Housing Starts: 5-Unit Structures or More	1959:Q1-2014:Q3	5	0	0
89	Hpermits	New Private Housing Units Authorized by Building Permit	1960:Q1-2014:Q4	5	0	1
90	Hstarts:MW	Housing Starts in Midwest Census Region	1959:Q1-2014:Q3	5	0	1
91	Hstarts:NE	Housing Starts in Northeast Census Region	1959:Q1-2014:Q3	5	0	1
92	Hstarts:S	Housing Starts in South Census Region	1959:Q1-2014:Q3	5	0	1
93	Hstarts:W	Housing Starts in West Census Region	1959:Q1-2014:Q3	5	0	1
94	Constr. Contracts	Construction contracts (mil. sq. ft.) (Copyright McGraw-Hill)	1963:Q1-2014:Q4	4	0	1
	(6) Prices					
95	PCED	Personal Consumption Expenditures: Chain-type Price Index	1959:Q1-2014:Q4	6	0	0

96	PCED_LFE	Personal Consumption Expenditures: Chain-type Price Index Less Food and Energy	1959:Q1-2014:Q4	6	0	0
97	GDP Defl	Gross Domestic Product: Chain-type Price Index	1959:Q1-2014:Q4	6	0	0
98	GPDI Defl	Gross Private Domestic Investment: Chain-type Price Index	1959:Q1-2014:Q4	6	0	1
99	BusSec Defl	Business Sector: Implicit Price Deflator	1959:Q1-2014:Q4	6	0	1
100	PCED_Goods	Goods	1959:Q1-2014:Q4	6	0	0
101	PCED_DurGoods	Durable goods	1959:Q1-2014:Q4	6	0	0
102	PCED_NDurGoods	Nondurable goods	1959:Q1-2014:Q4	6	0	0
103	PCED_Serv	Services	1959:Q1-2014:Q4	6	0	0
104	PCED_HouseholdServices	Household consumption expenditures (for services)	1959:Q1-2014:Q4	6	0	0
105	PCED_MotorVec	Motor vehicles and parts	1959:Q1-2014:Q4	6	0	1
106	PCED_DurHousehold	Furnishings and durable household equipment	1959:Q1-2014:Q4	6	0	1
107	PCED_Recreation	Recreational goods and vehicles	1959:Q1-2014:Q4	6	0	1
108	PCED_OthDurGds	Other durable goods	1959:Q1-2014:Q4	6	0	1
109	PCED_Food_Bev	Food and beverages purchased for off-premises consumption	1959:Q1-2014:Q4	6	0	1
110	PCED_Clothing	Clothing and footwear	1959:Q1-2014:Q4	6	0	1
111	PCED_Gas_Enrgy	Gasoline and other energy goods	1959:Q1-2014:Q4	6	0	1
112	PCED_OthNDurGds	Other nondurable goods	1959:Q1-2014:Q4	6	0	1
113	PCED_Housing-Utilities	Housing and utilities	1959:Q1-2014:Q4	6	0	1
114	PCED_HealthCare	Health care	1959:Q1-2014:Q4	6	0	1
115	PCED_TransSvg	Transportation services	1959:Q1-2014:Q4	6	0	1
116	PCED_RecServices	Recreation services	1959:Q1-2014:Q4	6	0	1
117	PCED_FoodServ_Acc.	Food services and accommodations	1959:Q1-2014:Q4	6	0	1
118	PCED_FIRE	Financial services and insurance	1959:Q1-2014:Q4	6	0	1
119	PCED_OtherServices	Other services	1959:Q1-2014:Q4	6	0	1
120	CPI	Consumer Price Index For All Urban Consumers: All Items	1959:Q1-2014:Q4	6	0	0
121	CPI_LFE	Consumer Price Index for All Urban Consumers: All Items Less Food & Energy	1959:Q1-2014:Q4	6	0	0
122	PPI:FinGds	Producer Price Index: Finished Goods	1959:Q1-2014:Q4	6	0	0
123	PPI	Producer Price Index: All Commodities	1959:Q1-2014:Q3	6	0	0
124	PPI:FinConsGds	Producer Price Index: Finished Consumer Goods	1959:Q1-2014:Q4	6	0	1
125	PPI:FinConsGds (Food)	Producer Price Index: Finished Consumer Foods	1959:Q1-2014:Q4	6	0	1
126	PPI:IndCom	Producer Price Index: Industrial Commodities	1959:Q1-2014:Q4	6	0	1
127	PPI:IntMat	Producer Price Index: Intermediate Materials: Supplies & Components	1959:Q1-2014:Q4	6	0	1

128	Real_P:SensMat	Index of Sensitive Matrerials Prices (Discontinued) Defl by PCE(LFE) Def	1959:Q1-2004:Q1	5	0	1
129	Real_Commod: spot price	Spot market price index:BLS & CRB: all commodities(1967=100) Defl by PCE(LFE)	1959:Q1-2009:Q1	5	0	0
130	NAPM com price	ISM Manufacturing: Prices Paid Index©	1959:Q1-2014:Q4	1	0	1
131	Real_Price:NatGas	PPI: Natural Gas Defl by PCE(LFE)	1967:Q1-2014:Q4	5	0	1
		(7) Productivity and Earnings				
132	Real_AHE:PrivInd	Average Hourly Earnings: Total Private Industries Defl by PCE(LFE)	1964:Q1-2014:Q4	5	0	0
133	Real_AHE:Const	Average Hourly Earnings: Construction Defl by PCE(LFE)	1959:Q1-2014:Q4	5	0	0
134	Real_AHE:MFG	Average Hourly Earnings: Manufacturing Defl by PCE(LFE)	1959:Q1-2014:Q4	5	0	0
135	CPH:NFB	Nonfarm Business Sector: Real Compensation Per Hour	1959:Q1-2014:Q4	5	0	1
136	CPH:Bus	Business Sector: Real Compensation Per Hour	1959:Q1-2014:Q4	5	0	1
137	OPH:nfb	Nonfarm Business Sector: Output Per Hour of All Persons	1959:Q1-2014:Q4	5	0	1
138	OPH:Bus	Business Sector: Output Per Hour of All Persons	1959:Q1-2014:Q4	5	0	0
139	ULC:Bus	Business Sector: Unit Labor Cost	1959:Q1-2014:Q4	5	0	0
140	ULC:NFB	Nonfarm Business Sector: Unit Labor Cost	1959:Q1-2014:Q4	5	0	1
141	UNLPay:nfb	Nonfarm Business Sector: Unit Nonlabor Payments	1959:Q1-2014:Q4	5	0	1
		(8) Interest Rates				
142	FedFunds	Effective Federal Funds Rate	1959:Q1-2014:Q4	2	0	1
143	TB-3Mth	3-Month Treasury Bill: Secondary Market Rate	1959:Q1-2014:Q4	2	0	1
144	TM-6MTH	6-Month Treasury Bill: Secondary Market Rate	1959:Q1-2014:Q4	2	0	0
145	EuroDol3M	3-Month Eurodollar Deposit Rate (London)	1971:Q1-2014:Q4	2	0	0
146	TB-1YR	1-Year Treasury Constant Maturity Rate	1959:Q1-2014:Q4	2	0	0
147	TB-10YR	10-Year Treasury Constant Maturity Rate	1959:Q1-2014:Q4	2	0	0
148	Mort-30Yr	30-Year Conventional Mortgage Rate	1971:Q2-2014:Q4	2	0	0
149	AAA Bond	Moody's Seasoned Aaa Corporate Bond Yield	1959:Q1-2014:Q4	2	0	0
150	BAA Bond	Moody's Seasoned Baa Corporate Bond Yield	1959:Q1-2014:Q4	2	0	0
151	BAA_GS10	BAA-GS10 Spread	1959:Q1-2014:Q4	1	0	1
152	MRTG_GS10	Mortg-GS10 Spread	1971:Q2-2014:Q4	1	0	1
153	tb6m_tb3m	tb6m-tb3m	1959:Q1-2014:Q4	1	0	1
154	GS1_tb3m	GS1_Tb3m	1959:Q1-2014:Q4	1	0	1
155	GS10_tb3m	GS10_Tb3m	1959:Q1-2014:Q4	1	0	1
156	CP_Tbill Spread	CP3FM-TB3MS	1959:Q1-2014:Q4	1	0	1
157	Ted_spr	MED3-TB3MS (Version of TED Spread)	1971:Q1-2014:Q4	1	0	1
158	gz_spread	Gilchrist-Zakrajsek Spread (Unadjusted)	1973:Q1-2012:Q4	1	0	0
159	gz_ebp	Gilchrist-Zakrajsek Excess Bond Premium	1973:Q1-2012:Q4	1	0	1
		(9) Money and Credit				

160	Real_mbase	St. Louis Adjusted Monetary Base; Bil. of $; M; SA; Defl by PCE(LFE)	1959:Q1-2014:Q4	5	0	0
161	Real_InsMMF	Institutional Money Funds Defl by PCE(LFE)	1980:Q1-2014:Q4	5	0	0
162	Real_m1	M1 Money Stock Defl by PCE(LFE)	1959:Q1-2014:Q4	5	0	0
163	Real_m2	M2SL Defl by PCE(LFE)	1959:Q1-2014:Q4	5	0	0
164	Real_mzm	MZM Money Stock Defl by PCE(LFE)	1959:Q1-2014:Q4	5	0	0
165	Real_C&Lloand	Commercial and Industrial Loans at All Commercial Banks Defl by PCE(LFE)	1959:Q1-2014:Q4	5	0	1
166	Real_ConsLoans	Consumer (Individual) Loans at All Commercial Banks/ Outlier Code because of change in data in April 2010. See FRB H8 Release Defl by PCE(LFE)	1959:Q1-2014:Q4	5	1	1
167	Real_NonRevCredit	Total Nonrevolving Credit Outstanding Defl by PCE(LFE)	1959:Q1-2014:Q4	5	0	1
168	Real_LoansRealEst	Real Estate Loans at All Commercial Banks Defl by PCE(LFE)	1959:Q1-2014:Q4	5	0	1
169	Real_RevolvCredit	Total Revolving Credit Outstanding Defl by PCE(LFE)	1968:Q1-2014:Q4	5	1	1
170	Real_ConsuCred	Total Consumer Credit Outstanding Defl by PCE(LFE)	1959:Q1-2014:Q4	5	0	0
171	FRBSLO_Consumers	FRB Senior Loans Officer Opions. Net Percentage of Domestic Respondents Reporting Increased Willingness to Make Consumer Installment Loans (Fred from 1982:Q2 on Earlier is DB series)	1970:Q1-2014:Q4	1	0	1
		(10) International Variables				
172	Ex rate: major	FRB Nominal Major Currencies Dollar Index (Linked to EXRUS in 1973:1)	1959:Q1-2014:Q4	5	0	1
173	Ex rate: Euro	U.S. / Euro Foreign Exchange Rate	1999:Q1-2014:Q4	5	0	1
174	Ex rate: Switz	Foreign exchange rate: Switzerland (Swiss franc per U.S.$) Fred 1971. EXRSW previous	1971:Q1-2014:Q4	5	0	1
175	Ex rate: Japan	Foreign exchange rate: Japan (yen per U.S.$) Fred 1971- EXRJAN previous	1971:Q1-2014:Q4	5	0	1
176	Ex rate: UK	Foreign exchange rate: United Kingdom (cents per pound) Fred 1971-> EXRUK Previous	1971:Q1-2014:Q4	5	0	1
177	EX rate: Canada	Foreign exchange rate: Canada (Canadian $ per U.S.$) Fred 1971 -> EXRCAN previous	1971:Q1-2014:Q4	5	0	1
178	OECD GDP	OECD: Gross Domestic Product by Expenditure in Constant Prices: Total Gross; Growth Rate (Quartely); Fred Series NAEXKP01O1Q657S	1961:Q2-2013:Q4	1	0	1
179	IP Europe	OECD: Total Ind. Prod (excl Construction) Europe Growth Rate (Quarterly); Fred Series PRINTO01OEQ657S	1960:Q2-2013:Q4	1	0	1
180	Global Ec Activity	Kilian's estimate of glaobal economic activity in industrial commodity markets (Kilian website)	1968:Q1-2014:Q4	1	0	1
		(11) Asset Prices, Wealth, and Household Balance Sheets				
181	S&P 500	S&P's Common Stock Price Index: Composite (1941-43=10)	1959:Q1-2014:Q4	5	0	1
182	Real_HHW:TA	Households and nonprofit organizations; total assets (FoF) Seasonally Adjusted (RATS X11) Defl by PCE(LFE)	1959:Q1-2014:Q3	5	0	0
183	Real_HHW:TL	Households and nonprofit organizations; total liabilities Seasonally Adjusted (RATS X11) Defl by PCE(LFE)	1959:Q1-2014:Q3	5	0	1
184	liab_PDI	Liabilities Relative to Person Disp Income	1959:Q1-2014:Q3	5	0	0
185	Real_HHW:W	Households and nonprofit organizations; net worth (FoF) Seasonally Adjusted (RATS X11)	1959:Q1-2014:Q3	5	0	1

		Defl by PCE(LFE)				
186	W_PDI	Networth Relative to Personal Disp Income	1959:Q1-2014:Q3	1	0	0
187	Real_HHW:TFA	Households and nonprofit organizations; total financial assets Seasonally Adjusted (RATS X11) Defl by PCE(LFE)	1959:Q1-2014:Q3	5	0	0
188	Real_HHW:TA_RE	TotalAssets minus Real Estate Assets Defl by PCE(LFE)	1959:Q1-2014:Q3	5	0	1
189	Real_HHW:TNFA	Households and nonprofit organizations; total nonfinancial assets (FoF) Seasonally Adjusted (RATS X11) Defl by PCE(LFE)	1959:Q1-2014:Q3	5	0	0
190	Real_HHW:RE	Households and nonprofit organizations; real estate at market value Seasonally Adjusted (RATS X11) Defl by PCE(LFE)	1959:Q1-2014:Q3	5	0	1
191	DJIA	Common Stock Prices: Dow Jones Industrial Average	1959:Q1-2014:Q4	5	0	1
192	VXO	VXO (Linked by N. Bloom) .. Average daily VIX from 2009 ->	1962:Q3-2014:Q4	1	0	1
193	Real_Hprice:OFHEO	House Price Index for the United States Defl by PCE(LFE)	1975:Q1-2014:Q4	5	0	1
194	Real_CS_10	Case-Shiller 10 City Average Defl by PCE(LFE)	1987:Q1-2014:Q4	5	0	1
195	Real_CS_20	Case-Shiller 20 City Average Defl by PCE(LFE)	2000:Q1-2014:Q4	5	0	1
		(12) Other				
196	Cons. Expectations	Consumer expectations NSA (Copyright University of Michigan)	1959:Q1-2014:Q4	1	0	1
197	PoilcyUncertainty	Baker Bloom Davis Policy Uncertainty Index	1985:Q1-2014:Q4	2	0	1
		(13) Oil Market Variables				
198	World Oil Production	World Oil Production.1994:Q1 on from EIA (Crude Oil including Lease Condensate); Data prior to 1994 from From Baumeister and Peerlman (2013)	1959:Q1-2014:Q3	5	0	0
199	World Oil Production	World Oil Production.1994:Q1 on from EIA (Crude Oil including Lease Condensate); Data prior to 1994 from From Baumeister and Peerlman (2013); Seasonally adjusted using RATS X11 (note seasonality before 1970)	1959:Q1-2014:Q3	5	0	1
200	IP: Energy Prds	IP: Consumer Energy Products	1959:Q1-2014:Q4	5	0	1
201	Petroleum Stocks	U.S. Ending Stocks excluding SPR of Crude Oil and Petroleum Products (Thousand Barrels); SA using X11 in RATS	1959:Q1-2014:Q4	5	0	1
202	Real_Price:Oil	PPI: Crude Petroleum Defl by PCE(LFE)	1959:Q1-2014:Q4	5	0	1
203	Real_Crudeoil Price	Crude Oil: West Texas Intermediate (WTI) - Cushing Oklahoma Defl by PCE(LFE)	1986:Q1-2014:Q4	5	0	1
204	Real_CrudeOil	Crude Oil Prices: Brent - Europe Defl by PCE(LFE) Def	1987:Q3-2014:Q4	5	0	1
205	Real_Price Gasoline	Conventional Gasoline Prices: New York Harbor Regular Defl by PCE(LFE)	1986:Q3-2014:Q4	5	0	1
206	Real_Refiners Acq. Cost (Imports)	U.S. Crude Oil Imported Acquisition Cost by Refiners (Dollars per Barrel) Defl by PCE(LFE)	1974:Q1-2014:Q4	5	0	1
207	Real_CPI Gasoline	CPI Gasoline (NSA) BLS: CUUR0000SETB01 Defl by PCE(LFE)	1959:Q1-2014:Q4	5	0	1