

Table 1: Tests for structural change in unconditional volatility - number of rejections and median percent change in standard deviation for types of series

Group	L		SC		NL		NL-SC	
	#R	$\Delta\sigma$	#R	$\Delta\sigma$	#R	$\Delta\sigma$	#R	$\Delta\sigma$
Production (24)	21	-40.9	22	-40.1	20	-34.9	20	-36.8
(Un)Employment (29)	27	-39.5	26	-38.7	26	-34.8	26	-38.7
Wages and salaries (7)	7	-36.2	7	-47.2	7	-39.8	7	-45.4
Construction (21)	14	-31.6	14	-31.9	14	-31.2	14	-31.2
Trade (10)	9	-34.7	9	-34.6	8	-34.1	8	-34.2
Inventories (10)	10	-32.4	10	-30.6	10	-31.0	10	-30.6
Orders (14)	13	-28.3	12	-27.5	13	-27.6	12	-26.8
Consumption (5)	5	-37.1	5	-38.0	5	-36.5	5	-36.4
Money and credit (20)	11	99.8	15	76.0	11	100.9	14	82.1
Stock Prices (11)	3	-32.5	3	-32.1	3	-33.0	3	-33.0
Dividends and volume (3)	1	-60.7	1	-61.5	1	-60.6	1	-61.5
Interest rates (11)	11	152.8	11	126.9	11	153.8	11	132.7
Exchange rates (6)	3	54.3	3	39.6	3	54.2	3	39.2
Producer prices (16)	12	66.0	13	-34.5	15	38.7	12	-35.4
Consumer prices (16)	12	-40.9	14	7.5	14	-42.8	11	-39.6
Miscellaneous (11)	9	-35.4	9	-33.8	9	-35.7	9	-35.2
Total (214)	168	-32.6	174	-33.6	170	-32.5	166	-33.5

The table contains results for HAC SupW tests for structural change in unconditional volatility. Columns headed “#R” contain the number of rejections of the null hypothesis of constant unconditional volatility at the 5% nominal significance level, where the procedure of Hansen (1997) is used to obtain approximate asymptotic p -values. Columns headed “ $\Delta\sigma$ ” contain the median percent change in the unconditional standard deviation for those series for which the SupW test statistic is significant. Numbers in parentheses following the series type denote the number of series tested. Columns headed “L” contain results obtained with a constant unconditional mean. Columns headed “SC” contain results obtained when allowing for a single structural change in the unconditional mean. Columns headed “NL” contain results obtained when allowing for different unconditional means in expansions and recessions. Columns headed “NL-SC” contain results obtained when allowing for expansion-recession nonlinearity and a single structural change during expansions in the unconditional mean.

Table 2: Tests for structural change and nonlinearity in unconditional mean - percent rejections per type

	SC-L	NL	NL-SC
Production (24)	7	23	14
(Un)Employment (29)	5	27	14
Wages and salaries (7)	7	4	7
Construction (21)	0	5	0
Trade (10)	1	10	1
Inventories (10)	2	6	4
Orders (14)	4	12	8
Consumption (5)	1	5	1
Money and credit (20)	13	5	14
Stock Prices (11)	3	0	2
Dividends and volume (3)	2	1	3
Interest rates (11)	0	7	0
Exchange rates (6)	0	0	0
Producer prices (16)	12	9	12
Consumer prices (16)	16	10	16
Miscellaneous (11)	2	8	2
Total (214)	75	132	98

The table contains the number of rejections per type of series at the 5% nominal significance level. The column headed “SC-L” concerns results from HAC SupW tests for a single structural change in the unconditional mean. The column headed “NL” concerns results from Wald tests for different unconditional means in business cycle expansions and recessions, defined using the NBER-dated turning points. The column headed “NL-SC” concerns results from SupW tests for a single structural change in the unconditional mean during expansions. The procedure of Hansen (1997) is used to obtain approximate asymptotic p -values for the structural change tests.

Table 3: Tests for nonlinearity in unconditional volatility - number of rejections and median percent change in standard deviation for groups

Group	L		SC		NL		NL-SC	
	#R	$\Delta\sigma$	#R	$\Delta\sigma$	#R	$\Delta\sigma$	#R	$\Delta\sigma$
Production (24)	19	86.9	19	84.7	7	51.5	8	50.2
(Un)Employment (29)	20	77.1	20	72.8	7	69.8	9	72.6
Wages and salaries (7)	3	39.3	1	47.6	2	35.9	5	46.8
Construction (21)	16	52.8	16	52.0	15	51.2	15	51.5
Trade (10)	7	34.9	5	32.1	1	43.6	1	43.7
Inventories (10)	6	37.9	6	37.0	2	44.0	4	33.4
Orders (14)	10	40.2	10	39.9	5	29.7	5	29.2
Consumption (5)	3	49.7	3	50.2	3	44.4	3	44.3
Money and credit (20)	1	-24.5	2	2.2	2	-32.0	2	5.5
Stock Prices (11)	11	77.9	11	74.9	11	78.1	11	78.4
Dividends and volume (3)	2	66.0	2	64.5	2	64.8	2	65.7
Interest rates (11)	9	144.3	8	152.2	9	132.3	9	132.9
Exchange rates (6)	2	32.7	2	33.2	2	31.8	2	32.9
Producer prices (16)	2	58.4	2	59.8	6	69.5	6	77.1
Consumer prices (16)	7	60.5	6	62.2	12	55.1	13	62.2
Miscellaneous (11)	1	30.8	0	—	1	59.0	1	60.6
Total (214)	119	60.7	113	61.4	87	56.3	96	56.9

The table contains results for HAC Wald tests for nonlinearity in unconditional volatility. Columns headed “#R” contain the number of rejections at the 5% nominal significance level. Columns headed “ $\Delta\sigma$ ” contain the median percent difference between the unconditional standard deviations in recessions and expansions (as a percentage of the latter) for those series for which the Wald statistic is significant. Columns headed “L” contain results obtained with a constant unconditional mean. Columns headed “SC” contain results obtained when allowing for a single structural change in the unconditional mean. Columns headed “NL” contain results obtained when allowing for different unconditional means in expansions and recessions. Columns headed “NL-SC” contain results obtained when allowing for expansion-recession nonlinearity and a single structural change during expansions in the unconditional mean.

Table 4: Tests for structural change in unconditional volatility during recessions and expansions - number of rejections and median percentage change in standard deviation for groups of series

	L				SC				NL				NL-SC			
	#R _E	$\Delta\sigma_E$	#R _R	$\Delta\sigma_R$	#R _E	$\Delta\sigma_E$	#R _R	$\Delta\sigma_R$	#R _E	$\Delta\sigma_E$	#R _R	$\Delta\sigma_R$	#R _E	$\Delta\sigma_E$	#R _R	$\Delta\sigma_R$
Production (24)	20	-33.8	18	53.2	21	-33.8	16	44.4	19	-31.3	23	-39.0	21	-31.8	23	-39.0
(Un)Employment (29)	23	-40.4	20	-0.1	25	-37.4	20	-42.8	23	-37.0	27	-51.4	22	-39.4	27	-51.4
Wages and salaries (7)	7	-37.8	7	-44.4	7	-48.4	7	-64.4	7	-38.6	7	50.4	7	-48.1	7	50.4
Construction (21)	11	-29.4	19	67.3	11	-29.3	18	66.8	11	-29.4	20	63.7	11	-29.2	20	63.7
Trade (10)	9	-33.8	10	50.9	9	-34.0	10	51.8	8	-35.5	8	56.2	8	-35.6	8	56.2
Inventories (10)	10	-31.2	8	65.7	9	-30.6	10	54.7	10	-30.9	9	-27.9	9	-30.0	9	-27.9
Orders (14)	11	-24.0	14	45.7	11	-23.7	14	40.1	9	-23.7	13	46.7	11	-24.1	13	46.7
Consumption (5)	4	-35.2	4	57.9	4	-34.8	4	52.1	4	-34.5	5	50.3	4	-34.0	5	50.3
Money (20)	12	97.0	15	-28.7	14	67.6	18	-37.5	12	97.0	17	-28.2	14	72.3	17	-28.2
Stock prices (11)	2	-27.8	11	54.2	1	-31.8	11	52.2	2	-28.3	11	59.0	1	-32.8	11	59.0
Dividends and volume (3)	1	-58.5	3	44.1	1	-59.6	3	48.0	1	-58.5	3	38.0	1	-59.6	3	38.0
Interest rates (11)	11	158.8	11	168.3	11	145.9	9	202.2	11	154.3	10	193.5	11	123.2	10	193.5
Exchange rates (6)	1	51.6	6	229.1	1	-48.1	6	236.4	3	52.2	6	220.8	1	-48.1	6	220.8
Producer prices (16)	12	53.9	13	152.6	11	-35.0	12	11.3	14	52.2	14	111.8	11	-34.2	14	111.8
Consumer prices (16)	9	-41.8	9	111.8	11	-30.3	13	142.2	10	-45.8	13	41.6	12	-33.4	13	41.6
Miscellaneous (11)	9	-34.6	11	-32.9	9	-33.8	9	-51.2	9	-34.6	11	-43.9	9	-34.3	11	-43.9
Total (214)	154	-31.4	179	57.7	156	-32.1	180	48.9	153	-30.9	197	-25.9	153	-31.8	197	-25.9

The table contains results for HAC SupW tests for structural change in unconditional volatility during recessions and expansions separately, while allowing these to be different under the null hypothesis. Columns headed “#R_E” (“#R_R”) contain the number of rejections at the 5% nominal significance level of the null hypothesis of constant unconditional volatility during expansions (recessions), where the procedure of Hansen (1997) is used to obtain approximate asymptotic p -values. Columns headed “ $\Delta\sigma_E$ ” (“ $\Delta\sigma_R$ ”) contain the median percent change in the unconditional standard deviation in expansions (recessions) for those series for which the SupW test statistic is significant. Columns headed “L” contain results obtained with a constant unconditional mean. Columns headed “SC” contain results obtained when allowing for a single structural change in the unconditional mean. Columns headed “NL” contain results obtained when allowing for different unconditional means in expansions and recessions. Columns headed “NL-SC” contain results obtained when allowing for expansion-recession nonlinearity and a single structural change during expansions in the unconditional mean.

Table 5: Tests for multiple structural changes in unconditional volatility, assuming constant unconditional mean

	1 change		2 changes		3 changes		Overall		Before 1981		After 1981	
	#R	$\Delta\sigma$	#R	$\Delta\sigma$	#R	$\Delta\sigma$	#R	$\Delta\sigma$	#B	$\Delta\sigma$	#B	$\Delta\sigma$
Production (24)	21	-40.9	1	161.6	0	—	22	-40.3	1	80.8	22	-40.3
(Un)Employment (29)	24	-39.6	2	-17.1	1	-38.4	27	-39.6	14	-29.7	17	-51.6
Wages and salaries (7)	4	-35.1	3	-21.6	0	—	7	-39.1	3	59.0	7	-41.5
Construction (21)	8	-32.2	5	-12.9	0	—	13	-36.1	5	55.0	13	-35.3
Trade (10)	6	-38.0	2	-29.9	0	—	8	-36.1	2	1.5	8	-33.6
Inventories (10)	9	-32.5	1	-3.5	0	—	10	-35.3	1	41.3	10	-32.4
Orders (14)	10	-28.6	2	33.3	0	—	12	-34.0	7	62.9	7	-28.9
Consumption (5)	4	-37.9	1	14.0	0	—	5	-34.1	1	73.6	5	-37.1
Money (20)	10	98.6	2	804.8	0	—	12	-32.4	9	99.8	5	39.8
Stock prices	6	-29.8	0	—	0	—	6	-32.4	1	-29.2	5	-30.4
Dividends and volume (3)	0	—	1	-69.6	0	—	1	-32.4	0	—	2	-44.8
Interest rates (11)	2	59.8	1	-15.1	8	163.8	11	-32.1	16	205.8	12	-57.7
Exchange rates (6)	1	-48.4	2	32.2	0	—	3	-32.0	2	81.1	3	-28.1
Producer prices (16)	9	86.0	4	39.3	0	—	13	-31.7	11	103.7	6	-36.1
Consumer prices (16)	2	22.3	5	-4.4	5	-27.9	12	-30.8	13	114.0	14	-49.6
Miscellaneous (11)	8	-35.7	0	—	0	—	8	-31.7	1	138.8	7	-36.1
Total (214)	124	-34.0	32	-3.9	14	10.3	170	-31.7	87	88.6	143	-37.1

The table contains results for sequential tests for multiple structural changes in unconditional volatility, when assuming a constant unconditional mean. In the blocks headed “ m change(s)”, $m = 1, 2, 3$, columns headed “#R” contain the number of series for which m changes in variability are found based upon the SupW test, while columns headed “ $\Delta\sigma$ ” contain the median percent “net” change in the standard deviation across these series, that is the difference between the standard deviations after the final change and before the first change. The column headed “Overall - $\Delta\sigma$ ” contain the median percent “net” change in the standard deviation across all series for which at least one change is found. In the blocks headed “Before (After) 1981”, columns headed “#B” contain the number of breaks which is dated before (after) January 1981, while columns headed “ $\Delta\sigma$ ” contain the median percent change in the standard deviation across these breaks.

Table 6: Tests for multiple structural changes in unconditional volatility - allowing for structural change in unconditional mean

	1 change		2 changes		3 changes		Overall		Before 1981		After 1981	
	#R	$\Delta\sigma$	#R	$\Delta\sigma$	#R	$\Delta\sigma$	#R	$\Delta\sigma$	#B	$\Delta\sigma$	#B	$\Delta\sigma$
Production (24)	20	-41.1	2	91.2	0	-	22	-40.1	2	74.8	22	-40.1
(Un)Employment (29)	22	-41.6	4	-13.0	1	-36.7	27	-39.3	15	-29.7	18	-50.2
Wages and salaries (7)	5	-47.2	1	-52.7	0	-	6	-40.3	1	69.0	6	-51.5
Construction (21)	9	-32.1	3	-18.9	0	-	12	-38.8	4	55.2	11	-32.5
Trade (10)	6	-38.9	2	-30.2	0	-	8	-38.8	2	1.5	8	-34.4
Inventories (10)	8	-31.0	2	-9.9	0	-	10	-36.9	2	42.9	10	-32.1
Orders (14)	10	-27.8	1	51.3	0	-	11	-36.4	6	18.2	6	-27.8
Consumption (5)	4	-38.0	1	12.2	0	-	5	-36.7	1	79.0	5	-38.0
Money (20)	9	88.2	4	24.2	0	-	13	-34.3	12	88.6	5	-40.1
Stock Prices	6	-29.3	0	-	0	-	6	-33.2	1	-26.9	5	-31.1
Dividends and volume (3)	0	-	1	-70.7	0	-	1	-33.6	0	-	2	-45.9
Interest rates (11)	1	-56.7	2	-14.4	8	143.8	11	-32.2	17	151.3	12	-58.5
Exchange rates (6)	2	9.1	0	-	0	-	2	-32.2	1	65.4	1	-47.1
Producer prices (16)	7	-41.9	5	27.7	0	-	12	-32.2	7	92.9	10	-39.6
Consumer prices (16)	6	-36.0	6	0.8	3	155.4	15	-32.1	9	108.5	18	-41.1
Miscellaneous (11)	8	-34.5	1	-2.6	0	-	9	-32.2	3	67.3	7	-35.9
Total (214)	123	-36.1	35	-3.9	12	133.6	170	-32.2	83	79.1	146	-39.5

The table contains results for sequential tests for multiple structural changes in unconditional volatility, when allowing for a single structural change in the unconditional mean. In the blocks headed “ m change(s)”, $m = 1, 2, 3$, columns headed “#R” contain the number of series for which m changes in variability are found based upon the SupW test, while columns headed “ $\Delta\sigma$ ” contain the median percent “net” change in the standard deviation across these series, that is the difference between the standard deviations after the final change and before the first change. The column headed “Overall - $\Delta\sigma$ ” contain the median percent “net” change in the standard deviation across all series for which at least one change is found. In the blocks headed “Before (After) 1981”, columns headed “#B” contain the number of breaks which is dated before (after) January 1981, while columns headed “ $\Delta\sigma$ ” contain the median percent change in the standard deviation across these breaks.

Table 7: Tests for multiple structural changes in unconditional volatility - allowing for nonlinearity in unconditional mean

	1 change		2 changes		3 changes		Overall		Before 1981		After 1981	
	#R	$\Delta\sigma$	#R	$\Delta\sigma$	#R	$\Delta\sigma$	#R	$\Delta\sigma$	#B	$\Delta\sigma$	#B	$\Delta\sigma$
Production (24)	21	-34.4	1	162.6	0	—	22	-33.9	2	28.4	21	-34.4
(Un)Employment (29)	17	-35.1	5	-49.6	2	-25.2	24	-34.8	18	-33.1	15	-39.9
Wages and salaries (7)	3	-36.6	3	-42.6	1	-36.6	7	-35.4	3	56.7	9	-36.6
Construction (21)	9	-31.2	4	-9.1	0	—	13	-34.4	6	58.1	11	-35.3
Trade (10)	6	-38.0	2	-28.8	0	—	8	-34.4	2	0.2	8	-32.3
Inventories (10)	9	-31.8	1	-3.3	0	—	10	-33.4	2	5.2	9	-31.8
Orders (14)	9	-27.6	3	-21.8	0	—	12	-31.9	7	63.2	8	-27.7
Consumption (5)	4	-37.4	1	10.5	0	—	5	-32.0	1	67.3	5	-36.5
Money (20)	10	100.6	2	718.3	0	—	12	-30.6	9	100.9	5	39.9
Stock prices	6	-29.6	0	—	0	—	6	-30.5	1	-28.7	5	-30.5
Dividends and volume (3)	0	—	1	-69.5	0	—	1	-30.6	0	—	2	-44.7
Interest rates (11)	2	60.5	1	-58.6	8	156.3	11	-30.1	18	168.0	10	-65.7
Exchange rates (6)	2	2.9	1	38.8	0	—	3	-29.9	2	73.3	2	-38.1
Producer prices (16)	7	74.6	7	37.6	0	—	14	-29.3	15	92.5	6	-39.1
Consumer prices (16)	2	19.6	6	-16.5	7	-33.8	15	-29.4	19	109.2	16	-57.1
Miscellaneous (11)	8	-36.1	0	—	0	—	8	-29.5	1	141.3	7	-36.5
Total (214)	115	-31.8	38	-7.5	18	-5.8	171	-29.5	106	81.3	139	-35.9

The table contains results for sequential tests for multiple structural changes in unconditional volatility, when allowing for a different unconditional mean in recessions and expansions. In the blocks headed “ m change(s)”, $m = 1, 2, 3$, columns headed “#R” contain the number of series for which m changes in variability are found based upon the SupW test, while columns headed “ $\Delta\sigma$ ” contain the median percent “net” change in the standard deviation across these series, that is the difference between the standard deviations after the final change and before the first change. The column headed “Overall - $\Delta\sigma$ ” contain the median percent “net” change in the standard deviation across all series for which at least one change is found. In the blocks headed “Before (After) 1981”, columns headed “#B” contain the number of breaks which is dated before (after) January 1981, while columns headed “ $\Delta\sigma$ ” contain the median percent change in the standard deviation across these breaks.

Table 8: Tests for multiple structural changes in unconditional volatility - allowing for nonlinear and structural change during expansions for unconditional mean

	1 change		2 changes		3 changes		Overall		Before 1981		After 1981	
	#R	$\Delta\sigma$	#R	$\Delta\sigma$	#R	$\Delta\sigma$	#R	$\Delta\sigma$	#B	$\Delta\sigma$	#B	$\Delta\sigma$
Production (24)	18	-36.8	2	81.2	0	—	20	-34.5	4	9.8	18	-36.9
(Un)Employment (29)	20	-41.2	5	-28.3	1	-5.4	26	-36.8	16	-32.7	17	-42.2
Wages and salaries (7)	5	-45.4	1	-49.0	0	—	6	-37.2	1	72.2	6	-53.1
Construction (21)	9	-31.7	4	-12.8	0	—	13	-36.3	5	50.9	12	-33.4
Trade (10)	5	-42.2	2	-29.4	0	—	7	-36.5	2	-0.5	7	-34.0
Inventories (10)	8	-30.9	2	-9.7	0	—	10	-34.5	2	41.7	10	-31.5
Orders (14)	11	-26.9	0	—	0	—	11	-32.7	6	16.2	5	-26.9
Consumption (5)	4	-36.6	1	11.4	0	—	5	-33.3	1	76.0	5	-36.7
Money (20)	9	96.2	4	19.8	0	—	13	-31.8	12	97.4	5	-39.6
Stock prices	7	-30.1	0	—	0	—	7	-31.7	1	-30.6	6	-29.2
Dividends and volume (3)	0	—	1	-70.7	0	—	1	-31.7	0	—	2	-45.9
Interest rates (11)	2	48.4	3	-17.2	6	90.8	11	-30.9	16	133.1	10	-66.3
Exchange rates (6)	2	9.9	0	—	0	—	2	-30.9	1	66.9	1	-47.2
Producer prices (16)	10	-39.0	3	23.2	0	—	13	-31.6	7	88.2	9	-38.0
Consumer prices (16)	4	-38.7	6	-28.0	3	77.5	13	-31.4	8	133.6	17	-46.7
Miscellaneous (11)	8	-34.7	1	-20.1	0	—	9	-31.6	3	37.8	7	-35.9
Total (214)	122	-34.1	35	-14.8	10	39.2	167	-31.6	85	66.9	137	-37.2

The table contains results for sequential tests for multiple structural changes in unconditional volatility, when allowing for different unconditional means in recessions and expansions, and for a single structural change during expansions. In the blocks headed “ m change(s)”, $m = 1, 2, 3$, columns headed “#R” contain the number of series for which m changes in variability are found based upon the SupW test, while columns headed “ $\Delta\sigma$ ” contain the median percent “net” change in the standard deviation across these series, that is the difference between the standard deviations after the final change and before the first change. The column headed “Overall - $\Delta\sigma$ ” contain the median percent “net” change in the standard deviation across all series for which at least one change is found. In the blocks headed “Before (After) 1981”, columns headed “#B” contain the number of breaks which is dated before (after) January 1981, while columns headed “ $\Delta\sigma$ ” contain the median percent change in the standard deviation across these breaks.

Table A.1: Tests for structural change in volatility

Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value
Production						
IP	8.87 [0.38]	10.76 [0.47]	5.96 [0.58]	-44.60 [5.87]	1984.03 [1983.08,1986.12]	7.47E-007
IPP	8.75 [0.34]	9.44 [0.37]	5.70 [0.77]	-39.65 [8.50]	1992.07 [1991.10,1995.08]	4.41E-005
IPF	9.32 [0.36]	10.41 [0.46]	7.65 [0.57]	-26.53 [6.33]	1984.02 [1981.05,1991.01]	0.00411
IPC	10.62 [0.43]	12.03 [0.55]	8.55 [0.66]	-28.95 [6.38]	1983.10 [1981.10,1990.04]	0.000875
IPCD	26.47 [1.28]	28.11 [1.65]	23.99 [2.02]	-14.68 [8.77]	1984.01 [1965.03,1999.12]	0.882
IPCN	8.88 [0.31]	9.42 [0.36]	7.23 [0.62]	-23.27 [7.24]	1990.02 [1986.10,1997.08]	0.000854
IPE	13.74 [0.54]	14.75 [0.59]	9.47 [1.20]	-35.83 [8.56]	1992.04 [1990.10,1995.12]	0.00170
IPI	10.49 [0.43]	11.44 [0.47]	6.38 [0.97]	-44.23 [8.76]	1992.06 [1992.01,1995.03]	3.28E-007
IPM	11.66 [0.51]	14.67 [0.62]	7.03 [0.77]	-52.10 [5.61]	1984.03 [1983.11,1986.03]	2.02E-008
IPMD	16.78 [0.76]	21.01 [0.93]	10.40 [1.14]	-50.52 [5.87]	1984.01 [1983.09,1986.06]	5.75E-007
IPMND	13.00 [0.58]	15.15 [0.73]	9.67 [0.91]	-36.14 [6.76]	1984.04 [1983.04,1989.06]	0.00222
IPMFG	9.69 [0.43]	11.75 [0.53]	6.59 [0.65]	-43.90 [6.07]	1984.01 [1983.06,1987.02]	3.26E-006
IPD	12.83 [0.58]	15.33 [0.73]	9.06 [0.89]	-40.89 [6.45]	1984.01 [1983.01,1987.09]	0.000219
IPN	8.61 [0.35]	9.47 [0.39]	5.43 [0.75]	-42.66 [8.24]	1991.06 [1991.01,1994.06]	1.43E-006
IPMIN	13.34 [0.57]	14.66 [0.69]	10.62 [0.99]	-27.54 [7.58]	1986.11 [1983.09,1994.09]	0.00367
IPUT	18.41 [0.83]	13.81 [1.10]	23.47 [1.15]	69.93 [15.91]	1980.12 [1977.03,1981.09]	1.41E-013
IPX	701.70 [34.02]	910.85 [45.31]	487.03 [45.91]	-46.53 [5.70]	1984.03 [1983.10,1986.10]	2.83E-005
IPXMCA	777.23 [33.85]	943.28 [41.97]	526.86 [51.53]	-44.15 [6.00]	1984.01 [1983.06,1987.01]	3.40E-006
IPXDCA	960.92 [49.31]	1236.27 [66.73]	684.13 [66.91]	-44.66 [6.18]	1984.01 [1983.04,1987.01]	5.53E-006
IPXNCA	717.39 [32.22]	827.25 [37.48]	473.67 [55.82]	-42.74 [7.23]	1990.01 [1989.07,1992.10]	1.48E-005
IPXMIN	1207.87 [57.81]	1397.76 [74.63]	948.83 [87.17]	-32.12 [7.21]	1986.06 [1984.09,1992.03]	0.000755
IPXUT	1757.32 [84.02]	1423.52 [121.02]	2047.16 [112.77]	43.81 [14.57]	1982.11 [1976.03,1984.09]	0.000539
GMPYQ	4.61 [0.20]	5.09 [0.25]	3.80 [0.32]	-25.46 [7.35]	1984.12 [1981.03,1994.08]	0.0709
GMYPXQ	4.69 [0.18]	5.04 [0.22]	4.02 [0.30]	-20.35 [6.88]	1986.03 [1979.05,1996.09]	0.0761
(Un)employment						
LHEL	2533.87 [101.84]	1719.51 [163.46]	2990.13 [122.35]	73.89 [18.00]	1974.05 [1971.10,1975.03]	4.54E-009
LHELX	52.54 [2.25]	69.24 [3.55]	42.48 [2.75]	-38.64 [5.07]	1975.01 [1974.01,1978.10]	0.0172
LHEM	3.46 [0.15]	4.02 [0.18]	2.55 [0.23]	-36.60 [6.41]	1984.08 [1983.07,1988.11]	7.08E-008
LHNAG	3.29 [0.13]	3.76 [0.16]	2.55 [0.20]	-32.27 [6.10]	1984.08 [1983.01,1989.03]	1.01E-007
LHUR	200.78 [8.80]	228.47 [11.04]	156.78 [13.92]	-31.38 [6.94]	1984.07 [1982.04,1990.09]	0.00246
LHU680	552.45 [22.33]	764.38 [56.22]	514.34 [23.84]	-32.71 [5.85]	1966.02 [1964.03,1970.07]	0.245
LHU5	59.03 [2.34]	75.25 [4.54]	53.42 [2.67]	-29.01 [5.56]	1970.04 [1967.10,1975.12]	0.0349
LHU14	64.06 [2.37]	78.43 [3.77]	55.40 [2.92]	-29.36 [5.04]	1975.01 [1973.02,1980.02]	0.00185
LHU15	64.08 [2.44]	78.64 [3.70]	53.90 [3.09]	-31.46 [5.09]	1976.06 [1974.08,1980.10]	0.0151
LHU26	94.65 [3.42]	120.79 [6.34]	84.61 [3.93]	-29.95 [4.91]	1971.02 [1968.12,1974.12]	0.000413
LHU27	84.95 [3.31]	110.76 [4.92]	66.76 [4.13]	-39.73 [4.59]	1976.07 [1975.09,1979.04]	1.18E-006
LHCH	243.41 [11.42]	225.19 [12.30]	336.37 [27.77]	49.37 [14.79]	1989.05 [1984.12,1991.09]	0.0913
LPNAG	2.46	3.13	1.40	-55.06	1984.07	1.22E-011

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Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value
	[0.10]	[0.12]	[0.15]	[5.25]	[1984.02,1986.01]	
LP	2.84	3.62	1.63	-55.03	1984.06	4.24E-010
	[0.12]	[0.15]	[0.18]	[5.40]	[1984.02,1986.02]	
LPGD	5.00	6.46	2.70	-58.24	1984.06	1.31E-009
	[0.23]	[0.28]	[0.35]	[5.66]	[1984.03,1986.03]	
LPMI	10.20	11.74	7.11	-39.47	1986.09	0.0220
	[0.51]	[0.61]	[0.86]	[8.01]	[1985.07,1991.10]	
LPCC	11.14	13.93	6.74	-51.61	1984.06	1.28E-008
	[0.58]	[0.72]	[0.90]	[6.94]	[1984.02,1987.07]	
LPEM	4.69	6.22	2.34	-62.37	1984.04	7.86E-008
	[0.24]	[0.28]	[0.35]	[5.90]	[1984.02,1986.01]	
LPED	6.41	8.34	3.35	-59.78	1984.07	2.33E-007
	[0.33]	[0.39]	[0.50]	[6.26]	[1984.04,1986.07]	
LPEN	3.28	4.29	1.72	-59.98	1984.04	2.56E-006
	[0.16]	[0.19]	[0.24]	[5.88]	[1984.01,1986.02]	
LPSP	1.83	2.06	0.90	-56.37	1992.03	1.50E-011
	[0.07]	[0.07]	[0.15]	[7.42]	[1991.11,1993.07]	
LPTU	4.77	5.99	3.62	-39.51	1979.06	0.00416
	[0.27]	[0.38]	[0.37]	[7.24]	[1976.07,1984.05]	
LPT	2.82	3.32	2.01	-39.55	1984.11	5.44E-009
	[0.12]	[0.15]	[0.19]	[6.41]	[1984.01,1988.08]	
LPFR	2.19	1.16	2.38	105.13	1966.01	1.60E-006
	[0.08]	[0.19]	[0.08]	[34.74]	[1964.07,1966.05]	
LPS	2.13	2.33	1.30	-44.17	1992.03	2.40E-005
	[0.08]	[0.09]	[0.17]	[7.75]	[1991.08,1994.05]	
LPGOV	2.80	3.12	1.67	-46.56	1990.12	1.96E-005
	[0.14]	[0.16]	[0.29]	[9.67]	[1990.09,1994.11]	
LW	128.30	149.81	101.62	-32.17	1984.05	0.0156
	[6.68]	[8.84]	[9.85]	[7.70]	[1981.08,1991.05]	
LPHRM	246.94	298.32	166.71	-44.12	1984.05	2.45E-006
	[13.27]	[16.58]	[20.71]	[7.61]	[1983.08,1989.01]	
LPMOSA	134.70	156.68	106.54	-32.00	1982.06	0.0290
	[7.36]	[9.71]	[10.99]	[8.18]	[1979.06,1991.12]	

Wages and salaries

LEH	3.33	3.86	2.36	-38.76	1987.09	1.22E-009
	[0.13]	[0.15]	[0.21]	[5.91]	[1987.02,1990.06]	
LEHCC	6.41	7.11	4.70	-34.00	1988.04	0.00140
	[0.29]	[0.34]	[0.53]	[8.10]	[1986.04,1993.12]	
LEHM	3.89	4.57	3.05	-33.40	1982.02	0.00174
	[0.17]	[0.22]	[0.25]	[6.36]	[1980.09,1987.11]	
LEHTU	4.99	5.87	4.19	-28.49	1981.08	0.000165
	[0.23]	[0.32]	[0.31]	[6.59]	[1979.07,1989.07]	
LEHTT	3.34	3.84	2.45	-36.17	1987.06	9.52E-008
	[0.14]	[0.17]	[0.23]	[6.67]	[1986.04,1991.03]	
LEHFR	5.97	7.37	2.70	-63.38	1989.06	2.71E-018
	[0.27]	[0.29]	[0.44]	[6.20]	[1989.04,1990.08]	
LEHS	4.10	4.79	2.80	-41.47	1987.12	3.96E-008
	[0.17]	[0.20]	[0.28]	[6.25]	[1987.08,1990.09]	

Construction

HSFR	92.92	103.93	74.15	-28.65	1985.03	5.22E-005
	[3.73]	[4.62]	[6.04]	[6.62]	[1982.04,1991.02]	
HSNE	221.68	240.45	192.63	-19.89	1984.04	0.218
	[8.61]	[10.96]	[13.63]	[6.74]	[1979.10,1997.12]	
HSMW	182.05	192.95	143.21	-25.78	1991.03	0.00618
	[7.54]	[8.47]	[15.98]	[8.90]	[1988.06,1999.11]	
HSSOU	113.49	122.17	100.04	-18.12	1984.04	0.0758
	[4.61]	[5.88]	[7.31]	[7.16]	[1975.06,1999.12]	
HSWST	144.68	150.81	134.40	-10.88	1985.01	0.734
	[5.30]	[6.68]	[8.64]	[6.96]	[1963.02,1999.12]	
HSBR	69.29	76.66	42.37	-44.73	1991.05	7.52E-007
	[2.98]	[3.29]	[6.28]	[8.53]	[1990.12,1994.05]	
HSBNE	133.82	153.69	104.60	-31.94	1984.03	0.00299
	[5.92]	[7.53]	[9.14]	[6.82]	[1981.12,1989.12]	
HSBMW	116.22	131.20	71.41	-45.57	1990.03	1.30E-008
	[5.61]	[6.33]	[10.95]	[8.75]	[1989.08,1993.09]	
HSBSOU	86.37	91.32	69.51	-23.88	1991.02	0.0789
	[3.53]	[3.99]	[7.37]	[8.73]	[1988.11,1999.12]	
HSBWST	101.66	109.05	86.17	-20.98	1987.05	0.173
	[4.45]	[5.37]	[7.77]	[8.12]	[1982.11,1999.12]	
HNS	85.72	77.10	92.39	19.83	1979.09	0.0246
	[3.32]	[4.99]	[4.39]	[9.63]	[1964.02,1988.06]	
HNSNE	215.09	148.48	226.66	52.65	1977.11	0.0137
	[11.62]	[29.94]	[12.48]	[31.91]	[1974.02,1979.02]	
HNSMW	160.14	168.93	130.43	-22.79	1994.01	0.411
	[8.19]	[9.27]	[17.04]	[10.94]	[1990.02,1999.12]	

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Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value
HNSSOU	120.72 [5.52]	147.63 [8.31]	101.39 [7.04]	-31.32 [6.14]	1984.11 [1983.01,1988.11]	0.0108
HNSWST	149.51 [7.14]	156.79 [7.81]	115.64 [16.84]	-26.25 [11.35]	1995.05 [1993.03,1999.12]	0.248
HNR	591.77 [26.26]	636.22 [29.29]	430.23 [55.84]	-32.38 [9.31]	1992.03 [1990.02,1997.07]	0.0358
HMOB	54.32 [2.31]	69.70 [3.05]	37.82 [3.16]	-45.74 [5.11]	1980.09 [1980.02,1983.02]	6.85E-009
CONTC	18.48 [0.78]	22.00 [1.03]	14.23 [1.13]	-35.29 [5.94]	1984.02 [1982.09,1987.10]	9.80E-005
CONPC	19.36 [0.84]	23.08 [1.09]	14.75 [1.22]	-36.08 [6.08]	1984.05 [1983.03,1988.03]	0.00125
CONQC	36.20 [1.56]	41.46 [2.10]	30.15 [2.25]	-27.28 [6.55]	1983.09 [1980.03,1990.01]	0.0358
CONDO9	113.36 [4.63]	70.66 [10.91]	122.31 [5.00]	73.09 [27.65]	1966.12 [1963.11,1967.07]	4.22E-007

Trade

MSMTQ	12.12 [0.45]	12.86 [0.49]	8.76 [1.03]	-31.86 [8.43]	1992.09 [1991.08,1997.02]	2.28E-005
MSMQ	16.57 [0.63]	18.10 [0.87]	14.92 [0.91]	-17.60 [6.38]	1980.10 [1973.09,1997.05]	0.00414
MSDQ	23.87 [0.92]	25.29 [1.02]	18.12 [2.04]	-28.34 [8.58]	1992.01 [1990.06,1998.04]	0.000782
MSNQ	13.26 [0.50]	14.25 [0.65]	11.89 [0.77]	-16.52 [6.58]	1983.04 [1975.09,1999.12]	0.263
WTQ	16.34 [0.65]	18.39 [0.77]	12.01 [1.12]	-34.70 [6.66]	1987.02 [1985.11,1991.04]	6.65E-008
WTDQ	18.79 [0.73]	20.02 [0.78]	12.68 [1.75]	-36.67 [9.09]	1993.04 [1991.12,1996.10]	9.04E-005
WTNQ	22.04 [0.90]	25.59 [1.17]	17.45 [1.33]	-31.82 [6.05]	1982.07 [1980.12,1987.11]	9.68E-007
RTQ	13.59 [0.61]	15.67 [0.73]	9.18 [1.05]	-41.40 [7.25]	1987.02 [1986.05,1990.11]	4.29E-008
RTDQ	29.38 [1.46]	33.20 [1.62]	15.93 [3.03]	-52.00 [9.43]	1991.02 [1990.12,1994.01]	5.44E-010
RTNQ	10.41 [0.40]	13.40 [0.53]	7.33 [0.53]	-45.34 [4.53]	1980.04 [1979.09,1982.03]	2.86E-009

Inventories

IVMTQ	4.45 [0.17]	5.08 [0.21]	3.43 [0.27]	-32.58 [6.05]	1984.08 [1983.02,1989.01]	8.03E-005
IVMFGQ	5.02 [0.20]	5.61 [0.24]	3.91 [0.33]	-30.36 [6.59]	1986.01 [1984.03,1991.07]	0.00768
IVMFDQ	6.73 [0.25]	7.58 [0.31]	5.12 [0.42]	-32.47 [6.16]	1986.02 [1984.09,1990.04]	0.00111
IVMFNQ	5.59 [0.21]	6.28 [0.24]	4.15 [0.35]	-34.02 [6.13]	1986.12 [1985.07,1990.06]	3.58E-007
IVWRQ	8.56 [0.34]	9.95 [0.41]	6.24 [0.53]	-37.30 [5.97]	1984.12 [1983.10,1988.04]	5.29E-005
IVRRQ	8.91 [0.35]	9.86 [0.41]	6.67 [0.63]	-32.41 [6.97]	1988.01 [1985.12,1992.06]	2.04E-007
IVSRQ	16.96 [0.66]	18.02 [0.72]	12.18 [1.52]	-32.39 [8.87]	1992.09 [1991.08,1997.07]	0.000141
IVSRMQ	26.01 [1.02]	27.28 [1.11]	19.38 [2.52]	-28.96 [9.69]	1993.07 [1992.03,1999.10]	0.000202
IVSRWQ	21.26 [0.78]	14.94 [1.99]	22.36 [0.83]	49.70 [20.75]	1965.12 [1962.01,1967.09]	0.00159
IVSRRQ	20.50 [0.92]	21.81 [1.00]	13.95 [2.24]	-36.02 [10.67]	1993.04 [1992.04,1998.07]	0.000123

Orders

MOCMQ	28.39 [1.12]	30.55 [1.23]	20.19 [2.40]	-33.90 [8.31]	1991.08 [1990.07,1996.01]	1.96E-006
MDOQ	38.44 [1.42]	40.37 [1.55]	28.96 [3.43]	-28.27 [8.92]	1993.03 [1991.05,1998.11]	4.69E-005
MSONDQ	86.01 [3.47]	51.99 [7.60]	94.43 [3.78]	81.61 [27.53]	1967.12 [1965.05,1968.07]	5.30E-006
MO	23.02 [0.85]	24.14 [0.91]	17.16 [2.09]	-28.93 [9.06]	1993.07 [1991.10,1998.11]	3.13E-005
MOWU	34.04 [1.23]	35.59 [1.33]	25.93 [3.03]	-27.15 [8.94]	1993.07 [1991.03,1999.04]	0.000273
MDO	38.31 [1.41]	40.24 [1.53]	28.84 [3.40]	-28.33 [8.88]	1993.03 [1991.05,1998.10]	2.67E-005
MDUWU	41.43 [1.49]	43.06 [1.62]	33.44 [3.60]	-22.34 [8.86]	1993.03 [1989.08,1999.12]	0.0149
MNO	14.23 [0.56]	11.42 [0.99]	15.49 [0.66]	35.60 [13.07]	1972.05 [1965.08,1976.01]	0.0426

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Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value
MNOU	22.58 [0.82]	24.38 [1.12]	20.53 [1.20]	-15.78 [6.25]	1981.04 [1972.01,1999.07]	0.322
MU	12.20 [0.42]	15.25 [0.58]	9.36 [0.56]	-38.62 [4.32]	1979.04 [1978.06,1981.07]	0.0106
MDU	12.61 [0.43]	15.81 [0.59]	9.62 [0.57]	-39.15 [4.24]	1979.04 [1978.07,1981.05]	0.00674
MNU	21.83 [0.85]	25.22 [1.07]	16.62 [1.32]	-34.10 [5.94]	1984.03 [1982.09,1988.03]	0.00512
MPCON	85.81 [3.31]	54.05 [7.25]	93.67 [3.61]	73.32 [24.20]	1967.12 [1965.04,1968.08]	1.73E-007
MPCONQ	85.38 [3.26]	56.76 [7.17]	92.46 [3.57]	62.90 [21.52]	1967.12 [1964.10,1968.10]	2.69E-006

Consumption

GMCQ	6.58 [0.27]	7.39 [0.32]	4.87 [0.46]	-34.10 [6.83]	1987.02 [1985.12,1991.09]	1.71E-005
GMCDQ	31.76 [1.38]	34.66 [1.53]	21.29 [2.90]	-38.58 [8.81]	1991.04 [1990.08,1995.07]	0.000403
GMCNQ	8.43 [0.32]	9.56 [0.38]	6.01 [0.55]	-37.14 [6.31]	1987.03 [1985.09,1990.03]	9.97E-008
GMCSQ	3.92 [0.16]	2.76 [0.28]	4.41 [0.18]	59.78 [17.73]	1971.11 [1968.01,1972.09]	1.00E-005
GMCANQ	87.21 [4.09]	95.12 [4.55]	57.98 [8.74]	-39.04 [9.64]	1991.06 [1990.11,1996.04]	0.00146

Money and credit

FM1	5.67 [0.22]	3.88 [0.30]	7.33 [0.29]	88.64 [16.39]	1979.03 [1977.04,1979.08]	8.50E-007
FM2	3.85 [0.16]	2.18 [0.31]	4.35 [0.17]	99.76 [29.88]	1969.03 [1967.02,1969.07]	5.41E-008
FM3	4.30 [0.15]	2.38 [0.30]	4.84 [0.16]	103.29 [26.79]	1968.10 [1967.05,1969.03]	7.83E-008
FML	5.24 [0.19]	4.86 [0.21]	6.52 [0.39]	34.07 [9.92]	1989.12 [1983.06,1992.09]	0.0748
FM2DQ	4.79 [0.16]	5.32 [0.21]	4.06 [0.25]	-23.60 [5.59]	1983.03 [1980.04,1990.01]	0.0961
FMFBA	3.33 [0.12]	4.52 [0.31]	3.12 [0.13]	-30.88 [5.62]	1965.12 [1963.11,1969.06]	0.469
FMBASE	4.43 [0.17]	3.94 [0.25]	4.90 [0.24]	24.53 [9.92]	1979.09 [1966.07,1986.04]	0.164
FMRRA	11.69 [0.43]	10.17 [0.54]	14.23 [0.69]	39.84 [10.04]	1985.01 [1980.05,1987.08]	0.000940
FMRNBA	18.61 [0.97]	10.47 [2.12]	20.66 [1.06]	97.35 [41.17]	1968.01 [1964.05,1968.03]	0.000272
FMRNBC	16.04 [0.72]	10.49 [1.51]	17.58 [0.79]	67.48 [25.24]	1968.01 [1964.04,1968.08]	1.33E-005
FCLS	4.47 [0.20]	4.28 [0.22]	5.57 [0.52]	30.17 [13.88]	1996.01 [1987.05,1999.11]	0.711
FCSGV	12.70 [0.59]	19.28 [1.48]	11.56 [0.62]	-40.04 [5.62]	1977.11 [1977.01,1980.06]	0.239
FCLRE	5.70 [0.22]	5.15 [0.32]	6.21 [0.30]	20.60 [9.46]	1986.06 [1976.02,1993.02]	0.948
FCLIN	8.04 [0.34]	9.38 [0.50]	6.97 [0.44]	-25.73 [6.14]	1985.07 [1981.12,1989.08]	0.630
FCLNBF	20.51 [1.09]	19.27 [1.17]	27.54 [2.78]	42.90 [16.85]	1991.01 [1987.07,1993.06]	0.00967
FCLNQ	11.07 [0.42]	8.40 [0.80]	12.05 [0.49]	43.44 [14.89]	1970.09 [1965.07,1972.07]	0.160
FCLBMC	35770.52 [2178.65]	11894.94 [2699.62]	58958.34 [2660.45]	395.66 [114.69]	1979.09 [1978.08,1979.10]	6.40E-013
CCI30M	94.75 [4.79]	48.62 [6.86]	127.29 [5.76]	161.81 [38.79]	1974.10 [1973.03,1974.11]	2.18E-019
CCINT	2821760.41 [197890.28]	681203.76 [420470.00]	3340000.45 [206888.87]	390.31 [304.16]	1979.11 [1979.10,1979.11]	4.72E-017
CCINV	1390861.62 [92550.64]	546717.00 [145085.18]	1815622.29 [102916.92]	232.10 [90.12]	1982.08 [1981.06,1982.09]	1.64E-017

Stock prices

FSNCOM	38.99 [1.60]	41.80 [1.79]	29.11 [3.36]	-30.37 [8.57]	1991.02 [1988.05,1996.10]	0.136
FSNIN	41.64 [1.91]	46.28 [2.18]	28.80 [3.62]	-37.77 [8.35]	1991.03 [1989.10,1994.11]	0.00395
FSNTR	59.10 [2.38]	64.74 [2.73]	43.72 [4.51]	-32.47 [7.53]	1991.02 [1989.06,1995.01]	0.00337
FSNUT	37.37 [1.42]	47.42 [2.65]	33.58 [1.63]	-29.18 [5.24]	1976.01 [1974.06,1980.10]	0.108
FSNFI	54.77 [2.31]	66.16 [4.34]	50.43 [2.68]	-23.77 [6.44]	1976.02 [1971.04,1982.10]	0.389

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<i>continued from previous page</i>						
Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value
FSPCOM	38.37 [1.57]	40.56 [1.77]	30.67 [3.31]	-24.37 [8.81]	1991.02 [1986.06,1999.12]	0.419
FSPIN	39.02 [1.61]	41.43 [1.81]	30.41 [3.42]	-26.61 [8.85]	1991.03 [1987.06,1998.11]	0.175
FSPCAP	45.74 [1.89]	48.30 [2.12]	36.74 [3.98]	-23.94 [8.89]	1991.02 [1986.04,1999.12]	0.205
FSPTR	57.15 [2.47]	62.45 [2.92]	45.10 [4.40]	-27.79 [7.81]	1991.02 [1988.08,1996.08]	0.0188
FSPUT	38.13 [1.44]	43.12 [2.25]	34.79 [1.84]	-19.32 [6.01]	1976.01 [1971.05,1991.02]	0.397
FSPFI	58.88 [2.58]	62.31 [3.08]	51.07 [4.64]	-18.04 [8.47]	1991.02 [1982.04,1999.12]	0.775
Dividends and volume						
FSDXP	40.82 [1.72]	33.68 [3.45]	43.16 [1.97]	28.16 [14.39]	1969.11 [1960.02,1975.02]	0.257
FSPXE	47.23 [1.93]	40.34 [3.88]	49.48 [2.22]	22.67 [13.02]	1969.11 [1960.02,1979.11]	0.322
FSNVV3	38.25 [2.41]	65.70 [3.83]	25.85 [2.57]	-60.65 [4.54]	1982.01 [1981.11,1983.05]	3.06E-012
Interest rates						
FYFF	482.53 [36.32]	627.19 [44.69]	242.23 [57.60]	-61.38 [9.59]	1984.12 [1984.10,1987.05]	0.00107
FYCP	486.49 [33.57]	195.92 [61.44]	599.14 [38.25]	205.80 [97.86]	1970.07 [1968.11,1970.08]	0.000177
FYGM3	418.08 [28.79]	528.00 [35.10]	225.40 [46.47]	-57.31 [9.25]	1985.06 [1985.04,1988.06]	0.00239
FYGM6	422.63 [26.17]	520.69 [31.94]	250.75 [42.29]	-51.84 [8.64]	1985.06 [1985.04,1990.01]	0.000692
FYGT1	462.66 [26.58]	199.05 [53.22]	543.11 [29.40]	172.85 [74.43]	1969.05 [1966.11,1969.06]	6.86E-005
FYGT5	372.89 [17.96]	160.61 [34.93]	439.96 [19.63]	173.93 [60.82]	1969.08 [1967.11,1969.09]	2.65E-008
FYGT10	312.61 [15.22]	193.89 [20.36]	426.96 [19.98]	120.21 [25.31]	1979.08 [1977.05,1979.11]	4.16E-011
FYAAAC	231.58 [12.50]	119.97 [16.35]	339.08 [16.04]	182.65 [40.77]	1979.08 [1977.11,1979.09]	2.14E-010
FYBAAC	217.95 [10.92]	122.57 [14.34]	309.81 [14.07]	152.76 [31.72]	1979.08 [1977.11,1979.10]	4.93E-014
FWAFIT	366.87 [21.46]	525.16 [29.17]	240.24 [26.09]	-54.25 [5.58]	1983.01 [1982.09,1984.06]	1.69E-005
FYFHA	294.41 [17.57]	139.70 [23.05]	443.41 [22.62]	217.39 [54.80]	1979.08 [1977.10,1979.09]	1.00E-013
Exchange rates						
EXRUS	20.81 [0.96]	12.94 [2.16]	22.63 [1.04]	74.85 [30.24]	1979.09 [1977.06,1980.06]	0.00813
EXRGER	31.86 [1.43]	22.32 [3.04]	34.44 [1.58]	54.32 [22.18]	1980.02 [1977.03,1981.09]	0.00358
EXRSW	35.76 [1.66]	28.18 [3.67]	37.67 [1.84]	33.66 [18.59]	1980.01 [1975.02,1985.11]	0.714
EXRJAN	33.39 [1.62]	23.83 [4.18]	35.04 [1.74]	47.05 [26.84]	1978.09 [1975.02,1981.02]	0.617
EXRUK	29.73 [1.47]	34.15 [1.64]	17.63 [2.72]	-48.37 [8.33]	1993.04 [1992.11,1995.03]	2.26E-008
EXRCAN	12.79 [0.54]	12.22 [0.64]	14.16 [0.99]	15.88 [10.14]	1992.08 [1977.04,1999.12]	0.775
Producer prices						
PWFSA	5.31 [0.24]	6.15 [0.33]	4.37 [0.35]	-28.98 [6.87]	1981.04 [1978.03,1989.04]	0.100
PWFCSA	6.26 [0.28]	7.12 [0.39]	5.28 [0.41]	-25.79 [7.04]	1981.04 [1976.08,1990.12]	0.0545
PWIMSA	6.03 [0.31]	3.80 [0.54]	7.07 [0.37]	86.00 [28.31]	1972.10 [1968.06,1972.12]	0.0523
PWCMSA	22.53 [1.16]	13.21 [1.99]	26.91 [1.36]	103.75 [32.31]	1972.10 [1969.06,1972.12]	0.000409
PWFXSA	5.88 [0.30]	2.92 [0.75]	6.43 [0.32]	120.12 [57.17]	1973.01 [1970.09,1973.03]	0.000276
PW160A	20.01 [0.88]	27.78 [1.70]	17.50 [0.97]	-37.02 [5.20]	1981.02 [1980.03,1983.07]	2.28E-005
PW150A	19.79 [0.96]	28.79 [1.71]	16.27 [1.07]	-43.48 [5.01]	1982.01 [1981.06,1984.02]	9.85E-005
PW561	55.59 [3.50]	26.59 [3.72]	109.77 [5.08]	312.77 [60.78]	1986.01 [1984.10,1986.02]	3.00E-008
PWCM	6.62 [0.28]	7.88 [0.38]	5.19 [0.40]	-34.18 [6.00]	1981.04 [1980.04,1986.08]	0.0711
<i>continued on next page</i>						

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Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value
PWXFA	6.38 [0.35]	3.32 [0.88]	6.92 [0.37]	108.38 [56.08]	1972.11 [1969.12,1973.01]	0.00204
PSM99Q	18.67 [0.71]	13.20 [1.26]	21.04 [0.83]	59.33 [16.40]	1972.02 [1968.09,1972.11]	9.29E-006
PSCCOM	22.83 [0.97]	15.24 [1.68]	26.32 [1.14]	72.77 [20.48]	1972.08 [1969.04,1973.01]	0.000383
PSCFOO	32.80 [1.49]	20.74 [2.54]	38.52 [1.75]	85.75 [24.29]	1972.11 [1969.09,1973.03]	0.000369
PSCMAT	24.76 [0.93]	18.61 [1.62]	27.61 [1.11]	48.41 [14.25]	1972.09 [1968.06,1974.03]	0.000945
PZFR	23.93 [1.19]	34.02 [2.59]	21.43 [1.29]	-37.01 [6.11]	1980.10 [1979.09,1983.12]	0.00872
PCGOLD	52.09 [3.51]	85.22 [5.98]	37.92 [3.91]	-55.50 [5.55]	1983.03 [1982.11,1985.07]	0.00625

Consumer prices

PUNEW	3.44 [0.14]	4.26 [0.17]	2.30 [0.20]	-46.02 [5.15]	1983.04 [1982.09,1985.05]	0.00428
PU81	4.88 [0.27]	6.68 [0.42]	3.67 [0.34]	-45.11 [6.16]	1980.11 [1980.08,1985.04]	0.0155
PUH	4.07 [0.18]	5.29 [0.25]	3.00 [0.23]	-43.35 [5.15]	1982.12 [1982.09,1985.10]	0.0896
PU83	4.21 [0.18]	3.21 [0.21]	6.09 [0.29]	89.49 [15.25]	1986.01 [1983.12,1986.07]	2.30E-006
PU84	6.70 [0.31]	5.32 [0.52]	7.42 [0.37]	39.63 [15.37]	1973.08 [1964.06,1975.08]	0.0388
PU85	3.49 [0.13]	4.37 [0.16]	2.28 [0.19]	-47.93 [4.68]	1983.03 [1982.11,1984.12]	1.64E-006
PUC	4.13 [0.18]	3.00 [0.31]	4.67 [0.22]	55.80 [17.85]	1972.12 [1967.11,1973.12]	0.0234
PUCD	3.98 [0.17]	4.57 [0.20]	2.87 [0.28]	-37.18 [6.73]	1986.04 [1985.05,1990.06]	0.0495
PUS	3.58 [0.15]	4.69 [0.19]	2.09 [0.22]	-55.54 [4.98]	1982.12 [1982.10,1984.08]	0.000341
PUXF	3.52 [0.14]	4.33 [0.18]	2.39 [0.21]	-44.90 [5.41]	1983.04 [1982.08,1985.08]	0.0143
PUXHS	3.53 [0.15]	4.18 [0.19]	2.70 [0.21]	-35.28 [5.89]	1982.06 [1980.12,1986.06]	0.0501
PUXM	3.52 [0.15]	4.30 [0.18]	2.43 [0.22]	-43.41 [5.59]	1983.04 [1982.09,1986.01]	0.0138
GMDC	2.84 [0.10]	3.37 [0.13]	2.14 [0.15]	-36.45 [5.20]	1982.07 [1981.08,1985.09]	0.0869
GMDCD	3.65 [0.16]	4.13 [0.21]	3.07 [0.23]	-25.78 [6.73]	1981.11 [1978.09,1991.05]	0.423
GMDCN	4.18 [0.18]	2.92 [0.31]	4.78 [0.21]	63.88 [18.81]	1972.12 [1968.10,1973.06]	0.0113
GMDCS	2.62 [0.09]	3.14 [0.12]	1.94 [0.13]	-38.38 [4.87]	1982.10 [1981.10,1985.02]	0.0353

Miscellaneous

PMI	2848.74 [113.50]	3303.85 [140.41]	2112.61 [178.58]	-36.06 [6.05]	1984.09 [1983.05,1988.05]	0.000748
PMP	4076.64 [171.03]	4660.92 [213.64]	3139.88 [270.50]	-32.63 [6.57]	1984.08 [1983.02,1990.01]	0.00229
PMNO	4355.43 [183.03]	4727.77 [230.80]	3747.82 [294.83]	-20.73 [7.34]	1984.10 [1979.04,1998.12]	0.218
PMDEL	3750.76 [182.38]	4960.85 [232.52]	2289.74 [255.49]	-53.84 [5.59]	1981.11 [1981.07,1984.02]	1.39E-010
PMNV	3763.75 [149.61]	4348.97 [197.94]	3051.19 [218.42]	-29.84 [5.95]	1981.12 [1979.06,1987.04]	0.00117
PMEMP	3179.93 [124.89]	3555.49 [145.78]	2297.49 [223.46]	-35.38 [6.82]	1988.01 [1986.12,1991.12]	0.000145
PMCP	4736.89 [199.43]	5083.28 [248.12]	4124.21 [329.99]	-18.87 [7.60]	1985.07 [1976.10,1999.12]	0.183
HHSNTN	3917.86 [174.12]	2226.73 [236.65]	5318.52 [215.37]	138.85 [27.16]	1978.02 [1976.08,1978.04]	8.96E-017
F6EDM	100.75 [4.51]	136.74 [9.71]	91.32 [4.97]	-33.22 [5.97]	1972.04 [1970.12,1978.07]	0.00414
FTMC6	128.36 [5.37]	139.19 [5.88]	84.89 [11.78]	-39.01 [8.85]	1991.06 [1990.09,1994.07]	9.84E-005
FTMM6	80.67 [3.96]	97.69 [4.77]	51.08 [6.29]	-47.71 [6.93]	1987.03 [1986.11,1990.01]	6.36E-010

Results for SupW tests for structural change in unconditional volatility for individual series, when assuming a constant unconditional mean. The column headed σ_0 contains the estimate of the unconditional standard deviation under the null hypothesis. Columns headed σ_1 and σ_2 contain estimates of the unconditional standard deviation before and after the break, respectively. The column headed $\Delta\sigma$ contains the percent change in standard deviation. The estimated break date is given in the column headed τ_v , with the 90% confidence interval for the break date given in brackets. The final column contains the asymptotic p -value of the SupW test. Figures in brackets below parameter estimates are standard errors.

Table A.2: Tests for structural change in mean and volatility

Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	τ_m	p-value _m
Production								
IP	8.82 [0.38]	10.62 [0.46]	6.05 [0.58]	-43.04 [5.96]	1984.03 [1983.08,1987.03]	6.19E-006	1966.10 [1960.02,1975.09]	0.305
IPP	8.69 [0.34]	9.37 [0.37]	5.73 [0.76]	-38.78 [8.50]	1992.07 [1991.08,1995.09]	5.84E-005	1969.03 [1961.01,1975.04]	0.367
IPF	9.25 [0.36]	10.29 [0.45]	7.64 [0.57]	-25.78 [6.40]	1984.04 [1981.04,1991.08]	0.00700	1966.10 [1960.06,1972.05]	0.350
IPC	10.52 [0.43]	11.84 [0.54]	8.53 [0.67]	-27.96 [6.53]	1984.01 [1981.11,1991.03]	0.00163	1972.12 [1962.03,1987.03]	0.196
IPCD	26.45 [1.28]	28.22 [1.64]	23.77 [2.02]	-15.76 [8.68]	1984.01 [1967.11,1999.12]	0.843	1991.02 [1963.03,1999.12]	0.637
IPCN	8.72 [0.32]	9.24 [0.36]	7.12 [0.63]	-23.01 [7.45]	1990.02 [1986.07,1998.03]	0.00144	1978.06 [1970.03,1990.02]	0.00101
IPE	13.61 [0.53]	14.74 [0.58]	8.85 [1.20]	-39.98 [8.45]	1992.04 [1991.03,1995.04]	3.12E-005	1993.08 [1991.03,1999.12]	0.0709
IPI	10.44 [0.43]	11.35 [0.46]	6.49 [0.96]	-42.84 [8.79]	1992.06 [1991.12,1995.06]	1.29E-006	1973.07 [1961.03,1983.12]	0.481
IPM	11.50 [0.51]	14.73 [0.61]	6.55 [0.76]	-55.54 [5.49]	1984.03 [1983.12,1985.12]	2.77E-010	1993.08 [1992.06,1999.12]	0.0273
IPMD	16.44 [0.76]	21.16 [0.92]	9.26 [1.13]	-56.22 [5.66]	1984.02 [1983.11,1985.12]	5.78E-010	1991.03 [1990.04,1997.10]	0.000780
IPMND	12.94 [0.57]	15.07 [0.72]	9.64 [0.89]	-36.06 [6.67]	1984.04 [1983.04,1989.04]	0.00139	1974.02 [1965.04,1977.08]	0.0847
IPMFG	9.62 [0.43]	11.60 [0.53]	6.63 [0.65]	-42.85 [6.19]	1984.01 [1983.06,1987.05]	1.41E-005	1966.10 [1960.02,1978.10]	0.235
IPD	12.64 [0.58]	15.43 [0.72]	8.43 [0.88]	-45.40 [6.23]	1984.01 [1983.04,1986.12]	1.16E-005	1993.08 [1992.02,1998.08]	0.00178
IPN	8.44 [0.35]	9.38 [0.40]	5.60 [0.69]	-40.29 [7.82]	1990.01 [1989.06,1993.07]	4.93E-006	1973.08 [1965.10,1978.08]	0.0841
IPMIN	13.23 [0.57]	14.54 [0.69]	10.55 [0.99]	-27.40 [7.62]	1986.11 [1983.07,1994.11]	0.00269	1981.08 [1972.06,1996.11]	0.00954
IPUT	18.25 [0.82]	13.09 [1.15]	22.94 [1.09]	75.24 [17.46]	1979.01 [1975.08,1979.09]	1.27E-015	1973.09 [1960.02,1976.03]	6.69E-008
IPX	696.69 [33.66]	905.28 [44.80]	482.58 [45.39]	-46.69 [5.67]	1984.03 [1983.10,1986.09]	3.26E-005	1975.03 [1971.01,1987.06]	0.927
IPXMCA	775.24 [33.70]	943.31 [41.73]	521.83 [51.24]	-44.68 [5.96]	1984.01 [1983.06,1986.11]	4.52E-006	1982.12 [1974.07,1999.12]	0.960
IPXDCA	959.75 [48.66]	1229.67 [65.89]	688.42 [66.06]	-44.02 [6.15]	1984.01 [1983.03,1987.01]	1.59E-006	1982.12 [1978.04,1999.12]	0.833
IPXNCA	715.94 [31.65]	823.37 [36.83]	477.61 [54.85]	-41.99 [7.15]	1990.01 [1989.06,1992.10]	1.78E-006	1975.03 [1970.05,1985.04]	0.951
IPXMIN	1201.76 [57.75]	1385.76 [74.64]	950.75 [87.17]	-31.39 [7.30]	1986.06 [1984.07,1992.07]	0.000844	1973.12 [1968.02,1984.12]	0.225
IPXUT	1761.25 [83.48]	1430.99 [120.26]	2048.02 [112.06]	43.12 [14.35]	1982.11 [1976.02,1984.08]	0.000722	1983.02 [1968.02,1999.12]	0.344
GMPYQ	4.50 [0.20]	4.95 [0.25]	3.75 [0.32]	-24.36 [7.56]	1984.12 [1980.10,1996.02]	0.100	1973.11 [1969.06,1980.02]	0.0294
GMYXPQ	4.60 [0.18]	3.60 [0.35]	4.92 [0.20]	36.81 [14.59]	1969.10 [1963.04,1972.11]	0.0424	1973.11 [1967.04,1978.08]	0.190
(Un)employment								
LHEL	2553.58 [100.07]	1491.00 [199.38]	2877.86 [110.14]	93.02 [26.85]	1969.05 [1967.04,1969.09]	2.99E-010	1979.10 [1960.02,1992.08]	0.937
LHELX	52.54 [2.21]	68.26 [3.49]	43.08 [2.71]	-36.89 [5.11]	1975.01 [1973.11,1979.02]	0.0143	1969.03 [1963.05,1977.03]	0.587
LHEM	3.43 [0.15]	4.01 [0.18]	2.49 [0.23]	-37.88 [6.39]	1984.08 [1983.08,1988.08]	3.01E-006	1990.01 [1985.04,1999.12]	0.482
LHNAG	3.25 [0.13]	3.69 [0.16]	2.55 [0.20]	-30.92 [6.25]	1984.08 [1982.12,1989.11]	5.77E-007	1979.12 [1972.10,1993.02]	0.253
LHUR	206.79 [8.31]	232.49 [10.43]	165.97 [13.15]	-28.61 [6.50]	1984.07 [1982.04,1990.12]	0.000459	1982.12 [1977.11,1992.09]	0.139
LHU680	555.80 [22.03]	773.91 [55.38]	516.59 [23.48]	-33.25 [5.66]	1966.02 [1964.05,1970.03]	0.198	1983.07 [1960.02,1999.12]	0.312
LHU5	59.05 [2.33]	75.40 [4.52]	53.40 [2.66]	-29.19 [5.52]	1970.04 [1967.11,1975.11]	0.0296	1981.12 [1960.02,1999.12]	0.262
LHU14	63.86 [2.36]	78.38 [3.76]	55.11 [2.92]	-29.69 [5.02]	1975.01 [1973.03,1979.12]	0.000608	1982.11 [1965.12,1999.12]	0.159
LHU15	63.44 [2.44]	78.61 [3.70]	52.84 [3.09]	-32.78 [5.04]	1976.06 [1974.10,1980.06]	0.00600	1983.01 [1975.02,1999.12]	0.131
LHU26	94.55 [3.41]	121.13 [6.30]	84.34 [3.91]	-30.37 [4.85]	1971.02 [1969.01,1974.10]	0.000252	1982.11 [1960.02,1999.12]	0.297
LHU27	84.46 [3.30]	103.98 [4.38]	63.14 [4.58]	-39.27 [5.09]	1980.11 [1980.01,1983.10]	2.91E-006	1969.02 [1960.04,1986.07]	0.168
LHCH	245.18 [11.30]	227.28 [12.17]	336.50 [27.49]	48.06 [14.46]	1989.05 [1984.10,1991.09]	0.0960	1982.09 [1960.02,1995.02]	0.252
LPNAG	2.43	3.00	1.49	-50.31	1984.11	4.20E-008	1979.06	0.767

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Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	τ_m	p-value _m
LP	[0.10]	[0.12]	[0.16]	[5.62]	[1984.06,1986.11]	1.25E-013	[1975.10,1989.07]	0.607
	2.83	3.65	1.55	-57.52	1984.06		1993.03	
	[0.12]	[0.14]	[0.18]	[5.26]	[1984.03,1985.12]		[1992.09,1999.12]	
LPGD	4.92	6.26	2.80	-55.27	1984.07	3.73E-006	1979.06	0.766
	[0.23]	[0.28]	[0.35]	[5.95]	[1984.04,1986.08]		[1974.07,1993.11]	
LPMI	10.01	11.31	7.40	-34.57	1986.09	0.00346	1982.03	0.00681
	[0.48]	[0.57]	[0.81]	[7.90]	[1984.12,1992.10]		[1980.09,1984.03]	
LPCC	10.90	13.95	6.09	-56.32	1984.06	8.17E-014	1993.01	0.00408
	[0.59]	[0.72]	[0.90]	[6.82]	[1984.03,1987.01]		[1992.05,1999.12]	
LPEM	4.62	6.09	2.29	-62.43	1984.07	3.32E-008	1969.07	0.474
	[0.23]	[0.28]	[0.35]	[6.01]	[1984.05,1986.04]		[1964.09,1973.03]	
LPED	6.24	8.07	3.34	-58.60	1984.07	7.63E-006	1979.06	0.675
	[0.33]	[0.40]	[0.50]	[6.55]	[1984.04,1986.10]		[1975.07,1991.11]	
LPEN	3.20	4.18	1.68	-59.92	1984.04	5.19E-006	1969.07	0.111
	[0.16]	[0.19]	[0.24]	[5.99]	[1984.01,1986.02]		[1965.09,1972.01]	
LPSP	1.78	1.98	0.91	-54.13	1992.03	6.66E-011	1979.08	0.181
	[0.07]	[0.07]	[0.15]	[7.61]	[1991.10,1993.09]		[1977.05,1993.06]	
LPTU	4.69	6.00	3.46	-42.35	1979.06	0.00180	1993.12	0.00788
	[0.27]	[0.38]	[0.37]	[7.13]	[1976.11,1983.09]		[1986.11,1999.12]	
LPT	2.72	3.25	1.84	-43.30	1984.11	0.000183	1989.03	0.162
	[0.12]	[0.15]	[0.19]	[6.47]	[1984.04,1988.04]		[1988.01,1993.06]	
LPFR	1.97	1.44	2.07	43.84	1965.12	0.00209	1987.07	0.00162
	[0.07]	[0.17]	[0.07]	[18.06]	[1961.11,1967.08]		[1986.11,1988.02]	
LPS	2.09	2.43	1.61	-33.64	1983.07	0.00128	1990.03	0.400
	[0.08]	[0.10]	[0.12]	[5.63]	[1982.03,1987.06]		[1987.08,1996.01]	
LPGOV	2.43	2.83	1.09	-61.34	1990.10	2.33E-010	1975.02	1.22E-008
	[0.14]	[0.15]	[0.28]	[10.04]	[1990.08,1993.03]		[1974.03,1976.04]	
LW	126.58	152.45	94.48	-38.03	1984.05	0.00134	1982.01	0.0703
	[6.71]	[8.81]	[9.82]	[7.37]	[1982.02,1988.12]		[1965.02,1999.12]	
LPHRM	249.71	304.96	180.13	-40.93	1982.04	4.30E-006	1982.01	0.754
	[13.13]	[17.17]	[19.27]	[7.14]	[1981.07,1987.10]		[1960.02,1999.12]	
LPMOSA	136.60	156.46	111.15	-28.96	1982.06	0.0550	1982.04	0.835
	[7.27]	[9.61]	[10.88]	[8.21]	[1979.03,1994.02]		[1960.02,1999.12]	

Wages and salaries

LEH	2.70	3.41	1.51	-55.88	1986.12	4.01E-020	1982.08	1.61E-022
	[0.12]	[0.14]	[0.18]	[5.54]	[1986.09,1988.05]		[1982.04,1983.05]	
LEHCC	5.98	8.83	5.47	-38.11	1966.02	0.00251	1982.01	1.27E-013
	[0.29]	[0.73]	[0.31]	[6.19]	[1964.08,1971.02]		[1980.10,1984.12]	
LEHM	3.54	4.47	2.36	-47.19	1982.06	9.57E-010	1982.01	8.29E-008
	[0.16]	[0.21]	[0.24]	[5.83]	[1981.09,1985.01]		[1981.07,1983.10]	
LEHTU	4.46	5.64	3.03	-46.35	1984.03	6.07E-009	1982.08	2.62E-018
	[0.21]	[0.27]	[0.29]	[5.78]	[1983.10,1986.10]		[1982.03,1983.10]	
LEHTT	2.96	3.45	2.08	-39.71	1987.06	7.40E-009	1981.09	5.90E-017
	[0.12]	[0.15]	[0.20]	[6.21]	[1986.09,1990.04]		[1981.04,1982.06]	
LEHFR	5.87	7.41	2.31	-68.80	1989.06	1.76E-023	1983.10	0.000831
	[0.26]	[0.28]	[0.43]	[5.96]	[1989.04,1990.05]		[1979.05,1992.08]	
LEHS	3.59	4.51	1.54	-65.73	1989.02	2.08E-024	1982.08	3.23E-020
	[0.16]	[0.18]	[0.27]	[6.16]	[1988.12,1990.03]		[1982.02,1984.02]	

Construction

HSFR	93.10	104.17	74.21	-28.76	1985.03	3.23E-005	1991.01	0.601
	[3.71]	[4.60]	[6.00]	[6.56]	[1982.05,1991.01]		[1967.07,1999.12]	
HSNE	221.65	240.46	192.53	-19.93	1984.04	0.211	1982.01	0.905
	[8.60]	[10.95]	[13.63]	[6.74]	[1979.09,1997.11]		[1960.02,1999.12]	
HSMW	182.22	193.24	142.96	-26.02	1991.03	0.00592	1982.02	0.696
	[7.52]	[8.44]	[15.93]	[8.85]	[1988.06,1999.08]		[1960.02,1999.12]	
HSSOU	113.29	122.13	99.61	-18.44	1984.04	0.0777	1991.01	0.593
	[4.61]	[5.88]	[7.31]	[7.16]	[1975.10,1999.12]		[1960.02,1999.12]	
HSWST	144.36	150.27	134.46	-10.52	1985.01	0.768	1966.10	0.837
	[5.30]	[6.68]	[8.65]	[7.00]	[1961.06,1999.12]		[1960.02,1999.12]	
HSBR	69.22	76.76	42.36	-44.82	1991.03	2.41E-007	1991.01	0.694
	[2.98]	[3.29]	[6.21]	[8.43]	[1990.10,1994.03]		[1982.05,1999.12]	
HSBNE	133.87	153.63	104.80	-31.79	1984.03	0.00349	1972.12	0.902
	[5.91]	[7.52]	[9.12]	[6.81]	[1981.12,1990.01]		[1961.02,1999.12]	
HSBMW	116.54	131.31	71.34	-45.67	1990.05	2.36E-008	1982.02	0.757
	[5.58]	[6.28]	[10.98]	[8.76]	[1989.10,1993.10]		[1961.02,1999.12]	
HSBSOU	86.52	91.34	70.13	-23.21	1991.02	0.103	1972.09	0.694
	[3.51]	[3.97]	[7.32]	[8.68]	[1988.10,1999.12]		[1961.02,1993.08]	
HSBWST	101.72	109.17	86.11	-21.13	1987.05	0.165	1966.11	0.875
	[4.43]	[5.35]	[7.74]	[8.08]	[1982.11,1999.12]		[1961.02,1983.11]	
HNS	85.31	77.04	91.72	19.05	1979.09	0.00982	1991.01	0.644
	[3.33]	[5.02]	[4.41]	[9.64]	[1964.02,1989.04]		[1964.02,1999.12]	
HNSNE	215.75	150.49	227.07	50.88	1977.11	0.0172	1981.10	0.886
	[11.57]	[29.81]	[12.42]	[31.00]	[1974.02,1979.03]		[1974.02,1999.12]	
HNSMW	160.82	169.53	131.41	-22.48	1994.01	0.413	1982.04	0.430
	[8.11]	[9.17]	[16.86]	[10.80]	[1990.02,1999.12]		[1974.02,1999.12]	

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Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	τ_m	p-value _m
HNSSOU	120.32 [5.54]	147.95 [8.32]	100.47 [7.05]	-32.09 [6.11]	1984.11 [1983.01,1988.08]	0.00699	1991.01 [1974.02,1999.12]	0.703
HNSWST	148.96 [7.15]	155.99 [7.83]	116.23 [16.89]	-25.49 [11.45]	1995.05 [1993.02,1999.12]	0.290	1978.04 [1974.02,1999.12]	0.427
HNR	593.06 [26.10]	637.74 [29.10]	430.67 [55.48]	-32.47 [9.23]	1992.03 [1990.02,1997.06]	0.0226	1980.04 [1964.02,1999.12]	0.841
HMOB	53.71 [2.30]	67.93 [3.05]	38.45 [3.16]	-43.40 [5.31]	1980.09 [1980.01,1983.08]	1.94E-007	1972.11 [1965.08,1982.07]	0.0778
CONTC	18.45 [0.78]	21.96 [1.01]	14.06 [1.13]	-35.97 [5.94]	1984.06 [1983.02,1987.12]	3.63E-005	1991.07 [1981.09,1999.12]	0.540
CONPC	19.28 [0.84]	23.17 [1.09]	14.45 [1.21]	-37.62 [5.99]	1984.05 [1983.04,1987.11]	0.000401	1991.12 [1983.02,1999.12]	0.706
CONQC	36.22 [1.55]	41.42 [2.08]	30.25 [2.23]	-26.97 [6.53]	1983.09 [1980.03,1990.03]	0.0368	1983.04 [1965.02,1999.12]	0.203
CONDO9	113.37 [4.62]	70.89 [10.89]	122.27 [4.98]	72.47 [27.40]	1966.12 [1963.11,1967.08]	5.61E-007	1992.05 [1960.02,1999.12]	0.200
Trade								
MSMTQ	12.03 [0.45]	12.83 [0.49]	8.43 [1.03]	-34.25 [8.44]	1992.09 [1991.09,1996.08]	2.32E-006	1991.12 [1984.02,1999.12]	0.128
MSMQ	16.59 [0.63]	18.07 [0.87]	14.98 [0.90]	-17.11 [6.38]	1980.10 [1973.04,1998.03]	0.00457	1973.01 [1960.02,1999.12]	0.336
MSDQ	23.67 [0.92]	25.30 [1.02]	17.12 [2.05]	-32.32 [8.54]	1992.01 [1990.08,1996.10]	0.000136	1991.03 [1980.03,1999.12]	0.0473
MSNQ	13.19 [0.50]	14.15 [0.64]	11.83 [0.77]	-16.40 [6.62]	1983.06 [1975.04,1999.12]	0.281	1972.12 [1960.02,1985.09]	0.201
WTQ	16.34 [0.64]	18.38 [0.77]	12.03 [1.11]	-34.56 [6.63]	1987.02 [1985.10,1991.03]	8.76E-008	1974.03 [1960.02,1999.12]	0.280
WTDQ	18.78 [0.72]	19.99 [0.78]	12.70 [1.74]	-36.46 [9.04]	1993.04 [1992.01,1996.10]	6.76E-005	1992.05 [1984.08,1999.12]	0.108
WTNQ	22.04 [0.89]	25.62 [1.16]	17.41 [1.32]	-32.03 [6.02]	1982.07 [1980.12,1987.09]	9.05E-007	1973.12 [1960.02,1999.12]	0.503
RTQ	13.50 [0.61]	15.68 [0.73]	8.90 [1.05]	-43.26 [7.21]	1987.02 [1986.06,1990.07]	2.19E-009	1993.03 [1989.11,1999.12]	0.0924
RTDQ	29.29 [1.46]	33.24 [1.61]	15.38 [3.03]	-53.74 [9.38]	1991.02 [1990.12,1993.11]	5.67E-011	1993.03 [1990.05,1999.12]	0.181
RTNQ	10.35 [0.40]	13.26 [0.53]	7.35 [0.54]	-44.54 [4.64]	1980.04 [1979.08,1982.05]	6.34E-009	1973.02 [1960.02,1999.12]	0.187
Inventories								
IVMTQ	4.37 [0.16]	4.94 [0.20]	3.44 [0.26]	-30.31 [6.02]	1984.10 [1983.03,1989.10]	0.00124	1974.12 [1972.07,1977.11]	0.0995
IVMFGQ	4.88 [0.19]	5.42 [0.23]	3.87 [0.31]	-28.64 [6.46]	1986.01 [1983.12,1991.10]	0.0155	1969.08 [1968.04,1971.05]	0.0422
IVMFDQ	6.60 [0.24]	7.46 [0.30]	5.19 [0.38]	-30.37 [5.85]	1984.10 [1983.03,1989.06]	0.00426	1969.08 [1968.01,1972.07]	0.172
IVMFNQ	5.45 [0.20]	6.06 [0.24]	4.19 [0.35]	-30.84 [6.33]	1986.12 [1985.04,1991.07]	1.74E-005	1969.09 [1966.09,1971.07]	0.000307
IVWRQ	8.50 [0.33]	9.89 [0.41]	6.18 [0.52]	-37.49 [5.89]	1984.12 [1983.10,1988.03]	2.63E-005	1979.07 [1974.12,1989.04]	0.160
IVRRQ	8.89 [0.35]	9.81 [0.41]	6.71 [0.62]	-31.55 [6.95]	1988.01 [1985.12,1992.09]	1.09E-006	1973.12 [1964.07,1989.05]	0.459
IVSRQ	16.80 [0.66]	17.94 [0.72]	11.69 [1.53]	-34.83 [8.89]	1992.09 [1991.09,1996.11]	8.29E-005	1991.01 [1984.06,1999.12]	0.112
IVSRMQ	25.88 [1.02]	27.19 [1.10]	19.04 [2.52]	-29.98 [9.68]	1993.07 [1992.04,1999.05]	0.000281	1975.03 [1960.02,1995.08]	0.275
IVSRWQ	21.14 [0.78]	14.85 [2.00]	22.24 [0.83]	49.73 [20.91]	1965.12 [1962.01,1967.10]	0.00130	1982.10 [1960.02,1999.12]	0.273
IVSRRQ	20.44 [0.92]	21.78 [1.00]	13.77 [2.23]	-36.77 [10.65]	1993.04 [1992.06,1998.05]	0.000129	1991.01 [1980.04,1999.12]	0.207
Orders								
MOCMQ	28.36 [1.11]	30.50 [1.23]	20.24 [2.40]	-33.64 [8.30]	1991.08 [1990.06,1996.02]	2.62E-006	1966.03 [1960.02,1992.03]	0.452
MDOQ	38.37 [1.42]	40.25 [1.54]	29.17 [3.42]	-27.51 [8.95]	1993.03 [1991.04,1999.03]	8.30E-005	1966.03 [1960.02,1991.01]	0.166
MSONDQ	85.75 [3.48]	51.02 [7.61]	94.35 [3.78]	84.91 [28.55]	1967.12 [1965.06,1968.07]	1.77E-006	1968.03 [1960.02,1991.01]	0.399
MO	23.03 [0.84]	24.11 [0.91]	17.36 [2.07]	-27.99 [9.01]	1993.07 [1991.08,1999.02]	0.000115	1981.04 [1961.10,1999.12]	0.304
MOWU	33.96 [1.23]	35.44 [1.33]	26.34 [3.01]	-25.68 [8.95]	1993.06 [1990.12,1999.12]	0.000600	1979.03 [1960.02,1999.12]	0.717
MDO	38.36 [1.40]	40.23 [1.53]	29.13 [3.38]	-27.59 [8.85]	1993.03 [1991.05,1999.01]	4.54E-005	1979.03 [1960.02,1999.12]	0.726
MDUWU	41.37 [1.49]	42.92 [1.62]	33.76 [3.60]	-21.34 [8.90]	1993.03 [1989.05,1999.12]	0.0218	1979.03 [1960.02,1999.12]	0.763
MNO	13.99 [0.55]	11.75 [0.98]	14.99 [0.66]	27.50 [12.05]	1972.05 [1962.02,1978.09]	0.0665	1981.02 [1976.02,1988.01]	0.0105

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Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	τ_m	p-value _m
MNOU	22.55 [0.82]	24.42 [1.11]	20.41 [1.19]	-16.40 [6.17]	1981.04 [1972.12,1997.11]	0.260	1988.12 [1975.04,1999.12]	0.0248
MU	11.65 [0.42]	14.90 [0.56]	8.62 [0.54]	-42.15 [4.24]	1979.04 [1978.08,1981.03]	0.000647	1980.03 [1979.02,1983.09]	0.0128
MDU	11.99 [0.43]	15.42 [0.58]	8.80 [0.56]	-42.96 [4.19]	1979.04 [1978.08,1981.02]	0.000536	1980.12 [1979.11,1984.05]	0.0148
MNU	21.56 [0.86]	25.05 [1.06]	15.85 [1.35]	-36.72 [6.01]	1984.10 [1983.07,1988.04]	0.00260	1987.10 [1983.03,1999.12]	0.570
MPCON	85.75 [3.31]	53.88 [7.25]	93.64 [3.60]	73.80 [24.32]	1967.12 [1965.04,1968.08]	9.55E-008	1979.03 [1960.02,1999.12]	0.615
MPCONQ	85.12 [3.27]	55.74 [7.18]	92.38 [3.57]	65.75 [22.29]	1967.12 [1964.12,1968.10]	6.46E-007	1968.03 [1960.02,1994.07]	0.308
Consumption								
GMCQ	6.52 [0.27]	7.33 [0.32]	4.82 [0.46]	-34.26 [6.88]	1987.02 [1985.12,1991.09]	3.16E-005	1973.02 [1960.02,1990.03]	0.289
GMCDQ	31.71 [1.38]	34.56 [1.53]	21.44 [2.90]	-37.97 [8.84]	1991.04 [1990.08,1995.08]	0.000582	1966.03 [1960.02,1999.12]	0.464
GMCNQ	8.41 [0.32]	9.57 [0.38]	5.93 [0.55]	-38.10 [6.26]	1987.03 [1985.11,1990.01]	2.57E-008	1993.03 [1986.07,1999.12]	0.149
GMCSQ	3.81 [0.16]	2.74 [0.25]	4.44 [0.19]	61.82 [16.63]	1974.09 [1970.12,1975.09]	1.10E-005	1973.06 [1966.03,1975.04]	0.000154
GMCANQ	87.10 [4.09]	94.94 [4.54]	58.10 [8.74]	-38.80 [9.66]	1991.06 [1990.10,1996.05]	0.00214	1986.09 [1960.02,1999.12]	0.616
Money and credit								
FM1	5.27 [0.21]	4.10 [0.29]	6.35 [0.28]	55.06 [12.85]	1979.03 [1975.05,1980.04]	0.00339	1993.12 [1993.05,1994.07]	5.53E-006
FM2	3.38 [0.14]	1.90 [0.34]	3.65 [0.15]	92.75 [35.93]	1966.03 [1963.10,1966.08]	0.00397	1987.01 [1986.08,1987.09]	7.51E-007
FM3	3.71 [0.14]	2.13 [0.34]	4.01 [0.14]	88.17 [30.46]	1966.04 [1964.04,1966.11]	0.0123	1987.01 [1986.05,1987.07]	0.000488
FML	4.83 [0.18]	4.58 [0.20]	5.86 [0.40]	27.76 [10.27]	1991.03 [1983.07,1996.03]	0.119	1987.01 [1985.11,1987.11]	0.000135
FM2DQ	4.37 [0.17]	2.75 [0.34]	4.84 [0.18]	75.98 [22.91]	1968.12 [1966.06,1969.06]	2.94E-008	1973.01 [1971.04,1973.12]	1.34E-005
FMFBA	2.99 [0.11]	2.82 [0.13]	3.44 [0.21]	21.82 [9.35]	1988.12 [1975.08,1997.04]	0.561	1967.06 [1966.11,1967.11]	2.46E-007
FMBASE	4.23 [0.17]	3.57 [0.24]	4.86 [0.23]	35.95 [11.18]	1979.09 [1972.04,1982.10]	0.00201	1970.04 [1968.05,1971.06]	1.58E-005
FMRRA	11.15 [0.40]	9.76 [0.59]	12.27 [0.54]	25.72 [9.41]	1977.12 [1968.05,1983.09]	0.0190	1993.12 [1993.01,1994.08]	1.22E-009
FMRNBA	17.96 [0.96]	10.62 [2.12]	19.80 [1.06]	86.36 [38.46]	1968.01 [1963.07,1968.04]	0.00129	1993.12 [1993.05,1996.11]	2.36E-007
FMRNBC	15.98 [0.71]	10.52 [1.50]	17.49 [0.79]	66.32 [24.91]	1968.01 [1964.03,1968.08]	1.59E-005	1980.03 [1960.02,1995.11]	0.490
FCLS	4.09 [0.21]	3.82 [0.23]	5.25 [0.47]	37.37 [14.86]	1995.02 [1985.04,1997.05]	0.510	1987.01 [1985.03,1988.09]	0.00837
FCSGV	12.08 [0.57]	15.04 [0.76]	9.01 [0.78]	-40.10 [5.98]	1987.03 [1986.05,1989.09]	0.00431	1994.04 [1993.07,1995.09]	0.00634
FCLRE	4.80 [0.21]	6.15 [0.34]	4.06 [0.26]	-33.92 [5.56]	1983.03 [1981.01,1985.01]	0.120	1990.07 [1989.11,1991.02]	0.00123
FCLIN	7.62 [0.31]	9.00 [0.46]	6.57 [0.40]	-27.05 [5.80]	1985.04 [1982.06,1988.11]	0.371	1986.09 [1985.08,1988.03]	0.00400
FCLNBF	20.00 [1.11]	17.33 [1.43]	23.74 [1.69]	37.03 [14.90]	1985.09 [1979.07,1988.12]	0.00470	1977.07 [1974.02,1981.01]	0.808
FCLNQ	10.80 [0.41]	7.52 [0.81]	11.88 [0.47]	57.92 [18.17]	1969.12 [1966.05,1970.11]	0.00329	1974.09 [1970.09,1977.03]	0.128
FCLBMC	35772.61 [2176.48]	11913.44 [2696.66]	58944.47 [2657.53]	394.77 [114.19]	1979.09 [1978.08,1979.10]	9.50E-013	1991.08 [1960.02,1999.12]	0.867
CCI30M	94.77 [4.77]	48.69 [6.83]	127.27 [5.73]	161.40 [38.50]	1974.10 [1973.03,1974.11]	7.66E-020	1989.09 [1960.11,1995.09]	0.662
CCINT	2832199.98 [196929.38]	696125.04 [418269.64]	3349354.97 [205806.20]	381.14 [290.60]	1979.11 [1979.10,1979.11]	1.95E-017	1989.01 [1976.02,1995.09]	0.956
CCINV	1389711.11 [92438.30]	546931.48 [144921.68]	1813784.94 [102800.94]	231.63 [89.86]	1982.08 [1981.06,1982.09]	1.99E-017	1991.01 [1976.02,1995.09]	0.744
Stock prices								
FSNCOM	39.14 [1.56]	42.04 [1.75]	28.95 [3.28]	-31.14 [8.31]	1991.02 [1988.09,1996.03]	0.0741	1974.12 [1965.09,1985.06]	0.197
FSNIN	41.57 [1.87]	46.32 [2.14]	28.60 [3.53]	-38.25 [8.13]	1991.02 [1989.10,1994.07]	0.00114	1974.12 [1969.06,1982.10]	0.0989
FSNTR	58.10 [2.38]	63.57 [2.74]	43.19 [4.52]	-32.06 [7.68]	1991.02 [1989.04,1995.04]	0.00619	1974.09 [1969.10,1982.02]	0.343
FSNUT	36.61 [1.40]	45.50 [2.62]	33.26 [1.61]	-26.89 [5.49]	1976.01 [1973.11,1981.08]	0.140	1974.09 [1972.03,1978.11]	0.00325
FSNFI	54.51 [2.29]	65.94 [4.31]	50.16 [2.66]	-23.94 [6.41]	1976.02 [1971.06,1982.09]	0.301	1990.10 [1983.01,1999.12]	0.392
<i>continued on next page</i>								

continued from previous page								
Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	τ_m	p-value _m
FSPCOM	38.31 [1.54]	40.47 [1.73]	30.68 [3.24]	-24.19 [8.64]	1991.02 [1986.12,1999.12]	0.327	1982.08 [1975.09,1990.07]	0.0606
FSPIN	38.94 [1.58]	41.38 [1.77]	30.35 [3.32]	-26.65 [8.63]	1991.02 [1987.12,1998.07]	0.109	1982.08 [1976.01,1990.04]	0.0182
FSPCAP	45.64 [1.86]	48.21 [2.10]	36.59 [3.93]	-24.09 [8.80]	1991.02 [1986.08,1999.12]	0.169	1982.08 [1970.02,1995.03]	0.0266
FSPTR	56.84 [2.47]	62.06 [2.93]	44.99 [4.41]	-27.51 [7.89]	1991.02 [1988.07,1996.10]	0.0237	1975.09 [1971.02,1995.06]	0.865
FSPUT	37.94 [1.42]	43.20 [2.22]	34.41 [1.82]	-20.35 [5.88]	1976.01 [1971.07,1988.09]	0.473	1974.09 [1966.08,1985.12]	0.380
FSPFI	58.57 [2.54]	62.20 [3.03]	50.32 [4.56]	-19.11 [8.32]	1991.02 [1983.05,1999.12]	0.689	1990.10 [1984.07,1998.12]	0.198
Dividends and volume								
FSDXP	40.66 [1.70]	34.41 [3.40]	42.70 [1.94]	24.11 [13.50]	1969.11 [1960.02,1976.03]	0.366	1982.08 [1974.05,1990.03]	0.0295
FSPXE	46.62 [1.89]	39.97 [3.79]	48.80 [2.17]	22.08 [12.79]	1969.11 [1960.02,1979.07]	0.434	1974.08 [1969.10,1978.03]	0.116
FSNVV3	37.95 [2.40]	65.81 [3.79]	25.36 [2.54]	-61.46 [4.46]	1982.01 [1981.11,1983.04]	9.51E-012	1984.06 [1982.01,1997.07]	0.00271
Interest rates								
FYFF	485.50 [36.00]	623.01 [44.40]	257.09 [57.22]	-58.73 [9.64]	1984.12 [1984.10,1987.05]	0.00475	1981.06 [1976.09,1999.12]	0.483
FYCP	486.31 [33.39]	198.41 [61.11]	597.92 [38.05]	201.35 [94.78]	1970.07 [1968.12,1970.08]	0.000311	1981.05 [1970.03,1997.08]	0.529
FYGM3	421.29 [28.50]	527.61 [34.79]	234.94 [46.07]	-55.47 [9.21]	1985.06 [1985.04,1988.07]	0.00304	1981.05 [1971.08,1999.12]	0.468
FYGM6	422.15 [26.02]	518.81 [31.77]	252.72 [42.06]	-51.29 [8.64]	1985.06 [1985.04,1990.02]	0.00131	1981.08 [1971.11,1999.12]	0.475
FYGT1	460.07 [26.48]	198.77 [53.03]	539.81 [29.30]	171.57 [73.94]	1969.05 [1966.10,1969.07]	0.000144	1981.08 [1970.04,1999.12]	0.442
FYGT5	368.96 [17.89]	162.94 [34.87]	434.05 [19.60]	166.38 [58.26]	1969.08 [1967.10,1969.09]	4.30E-007	1981.09 [1969.12,1991.12]	0.281
FYGT10	308.99 [15.12]	194.47 [20.30]	419.28 [19.92]	115.60 [24.72]	1979.08 [1977.04,1979.11]	4.98E-010	1981.09 [1970.06,1988.03]	0.200
FYAAAC	231.70 [12.20]	127.08 [16.08]	332.47 [15.78]	161.62 [35.36]	1979.08 [1977.09,1979.09]	2.86E-008	1981.09 [1973.12,1985.12]	0.0817
FYBAAC	219.15 [10.46]	133.12 [13.87]	302.02 [13.61]	126.88 [25.76]	1979.08 [1977.08,1979.10]	7.89E-010	1982.02 [1977.06,1985.04]	0.0575
FWAFIT	361.74 [21.31]	528.20 [28.57]	228.56 [25.55]	-56.73 [5.37]	1983.01 [1982.10,1984.04]	1.65E-006	1991.01 [1990.05,1994.04]	0.183
FYFHA	302.34 [16.99]	159.00 [22.45]	440.39 [22.04]	176.97 [41.50]	1979.08 [1977.08,1979.09]	3.99E-010	1981.09 [1970.01,1985.09]	0.154
Exchange rates								
EXRUS	20.59 [0.95]	13.44 [2.15]	22.23 [1.03]	65.39 [27.49]	1979.09 [1977.01,1980.11]	0.0335	1985.03 [1976.11,1991.03]	0.447
EXRGER	31.76 [1.41]	24.21 [3.01]	33.80 [1.56]	39.59 [18.52]	1980.02 [1975.08,1982.10]	0.0312	1985.02 [1975.02,1993.09]	0.711
EXRSW	35.46 [1.64]	27.16 [3.63]	37.55 [1.82]	38.23 [19.65]	1980.01 [1975.02,1984.03]	0.420	1978.10 [1975.02,1981.09]	0.186
EXRJAN	33.20 [1.61]	23.98 [4.15]	34.79 [1.72]	45.10 [26.11]	1978.09 [1975.02,1981.01]	0.605	1995.04 [1986.07,1999.12]	0.809
EXRUK	29.42 [1.44]	33.67 [1.62]	17.80 [2.67]	-47.12 [8.34]	1993.04 [1992.11,1995.05]	2.73E-009	1985.02 [1978.06,1989.11]	0.452
EXRCAN	12.63 [0.54]	11.91 [0.64]	14.35 [1.00]	20.47 [10.58]	1992.08 [1982.07,1999.12]	0.507	1986.01 [1975.02,1998.07]	0.626
Producer prices								
PWFSA	5.25 [0.23]	6.35 [0.30]	4.00 [0.33]	-37.07 [5.94]	1981.04 [1979.08,1985.02]	0.000108	1982.01 [1980.11,1984.12]	0.00238
PWFCSA	6.16 [0.27]	6.78 [0.30]	3.94 [0.57]	-41.91 [8.86]	1991.03 [1990.05,1994.10]	0.000661	1982.01 [1980.02,1985.11]	0.0101
PWIMSA	5.92 [0.30]	7.71 [0.46]	4.79 [0.37]	-37.83 [6.07]	1975.06 [1974.04,1981.05]	0.0764	1981.08 [1980.11,1984.06]	0.00320
PWCMSA	22.43 [1.15]	13.74 [1.98]	26.51 [1.36]	92.90 [29.49]	1972.10 [1969.01,1972.12]	0.00216	1980.11 [1966.06,1993.11]	0.265
PWFXSA	5.43 [0.27]	7.78 [0.57]	4.80 [0.30]	-38.29 [5.94]	1974.10 [1973.03,1977.12]	0.00819	1982.01 [1981.05,1983.01]	0.000679
PW160A	19.47 [0.89]	26.34 [1.73]	17.25 [0.99]	-34.50 [5.71]	1981.02 [1979.12,1984.05]	6.05E-005	1980.11 [1978.03,1988.01]	0.253
PW150A	19.65 [0.94]	28.14 [1.67]	16.34 [1.05]	-41.93 [5.07]	1982.01 [1981.05,1984.03]	0.000230	1979.06 [1976.12,1984.08]	0.439
PW561	49.12 [3.39]	20.14 [3.55]	103.28 [4.85]	412.92 [93.58]	1986.01 [1984.12,1986.02]	8.49E-012	1990.04 [1987.06,1990.07]	2.71E-007
PWCM	6.33 [0.27]	7.90 [0.36]	4.53 [0.38]	-42.66 [5.53]	1981.04 [1980.08,1984.05]	0.00245	1981.04 [1980.06,1984.08]	2.07E-005

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Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	τ_m	p-value _m
PWXFA	5.81 [0.30]	9.01 [0.60]	4.89 [0.32]	-45.77 [5.08]	1975.03 [1974.06,1977.09]	0.281	1981.04 [1980.11,1982.02]	8.12E-008
PSM99Q	18.52 [0.70]	13.88 [1.24]	20.53 [0.82]	47.97 [14.53]	1972.02 [1967.09,1973.05]	0.000245	1980.03 [1973.10,1987.12]	0.669
PSCCOM	22.18 [0.93]	16.14 [1.63]	24.97 [1.11]	54.69 [17.07]	1972.08 [1967.10,1973.07]	0.00922	1984.01 [1982.06,1986.11]	0.000535
PSCFOO	32.13 [1.44]	21.82 [2.48]	37.02 [1.71]	69.64 [20.80]	1972.11 [1968.11,1973.05]	0.00276	1984.01 [1982.03,1987.08]	0.000799
PSCMAT	24.14 [0.91]	19.48 [1.59]	26.31 [1.08]	35.09 [12.33]	1972.09 [1965.12,1975.07]	0.0323	1984.06 [1982.03,1987.07]	0.00792
PZFR	21.60 [1.07]	26.87 [2.29]	20.18 [1.19]	-24.90 [7.78]	1981.02 [1977.07,1988.07]	0.149	1981.08 [1981.02,1982.05]	1.19E-030
PCGOLD	50.58 [3.37]	81.72 [5.74]	37.25 [3.76]	-54.42 [5.60]	1983.03 [1982.11,1985.07]	0.00248	1980.01 [1979.03,1982.10]	0.0459

Consumer prices

PUNEW	3.19 [0.13]	2.00 [0.21]	3.77 [0.15]	88.72 [21.61]	1973.01 [1970.09,1973.04]	3.64E-005	1967.05 [1966.06,1967.07]	3.24E-010
PU81	4.50 [0.26]	7.06 [0.41]	3.13 [0.30]	-55.68 [4.97]	1979.02 [1978.11,1981.07]	2.58E-005	1981.03 [1980.11,1983.08]	2.85E-005
PUH	3.09 [0.16]	4.79 [0.21]	1.58 [0.19]	-67.04 [4.28]	1983.01 [1982.11,1984.01]	1.45E-006	1982.06 [1982.04,1983.03]	1.64E-006
PU83	4.06 [0.17]	3.25 [0.20]	5.57 [0.28]	71.60 [13.71]	1986.01 [1983.01,1986.10]	0.000132	1993.02 [1991.10,1994.01]	5.64E-013
PU84	6.72 [0.29]	7.13 [0.33]	5.24 [0.63]	-26.49 [9.41]	1991.03 [1988.05,1999.12]	0.191	1981.11 [1977.02,1985.09]	0.00141
PU85	3.25 [0.11]	3.80 [0.14]	2.49 [0.17]	-34.34 [5.09]	1983.03 [1982.03,1986.06]	0.0380	1966.02 [1965.07,1966.05]	4.82E-018
PUC	4.07 [0.17]	4.46 [0.19]	2.70 [0.36]	-39.37 [8.46]	1991.03 [1990.06,1994.11]	0.00121	1982.07 [1980.12,1985.03]	1.13E-006
PUCD	3.84 [0.15]	4.75 [0.18]	2.41 [0.23]	-49.39 [5.22]	1984.05 [1983.12,1986.03]	1.59E-007	1984.09 [1984.04,1986.07]	1.25E-005
PUS	3.54 [0.14]	4.26 [0.17]	2.56 [0.20]	-39.94 [5.33]	1982.12 [1982.08,1986.02]	0.0643	1966.02 [1965.03,1966.05]	6.72E-010
PUXF	3.34 [0.13]	2.38 [0.22]	3.83 [0.16]	60.70 [16.24]	1973.06 [1969.08,1973.09]	0.00760	1966.03 [1965.05,1966.05]	6.16E-011
PUXHS	3.43 [0.13]	2.55 [0.24]	3.81 [0.16]	49.29 [15.19]	1972.02 [1967.02,1972.07]	0.0144	1967.05 [1966.03,1967.09]	3.16E-009
PUXM	3.43 [0.13]	2.42 [0.22]	3.92 [0.16]	61.65 [16.22]	1973.01 [1969.06,1973.03]	0.0102	1967.04 [1966.04,1967.07]	3.99E-009
GMDC	2.56 [0.10]	1.31 [0.16]	3.17 [0.11]	142.00 [30.80]	1973.02 [1971.11,1973.04]	6.35E-008	1967.05 [1966.07,1967.07]	3.64E-010
GMDCD	3.39 [0.15]	4.07 [0.20]	2.62 [0.21]	-35.66 [6.11]	1981.06 [1980.05,1986.06]	0.0143	1993.10 [1993.06,1994.07]	6.22E-006
GMDCN	3.96 [0.17]	4.30 [0.19]	2.74 [0.36]	-36.35 [8.94]	1991.03 [1990.02,1995.12]	0.0118	1981.03 [1979.11,1983.04]	0.000327
GMDCS	2.24 [0.09]	1.14 [0.13]	2.82 [0.10]	146.93 [30.40]	1973.11 [1972.09,1973.12]	7.45E-010	1967.11 [1967.03,1967.12]	1.58E-013

Miscellaneous

PMI	2844.57 [113.39]	3296.01 [140.33]	2114.36 [178.47]	-35.85 [6.06]	1984.09 [1983.05,1988.06]	0.000688	1975.01 [1960.02,1999.12]	1.00
PMP	4066.67 [171.18]	4647.99 [213.87]	3134.65 [270.81]	-32.56 [6.60]	1984.08 [1983.02,1990.02]	0.00228	1980.05 [1960.02,1999.12]	1.00
PMNO	4359.72 [182.49]	4722.39 [230.18]	3767.89 [294.05]	-20.21 [7.34]	1984.10 [1979.02,1999.09]	0.233	1980.06 [1960.02,1999.12]	1.00
PMDEL	3743.29 [182.06]	4935.14 [232.49]	2304.28 [255.46]	-53.31 [5.62]	1981.11 [1981.07,1984.03]	1.81E-010	1966.03 [1960.02,1992.06]	0.860
PMNV	3767.11 [149.27]	4347.65 [197.54]	3060.25 [217.97]	-29.61 [5.95]	1981.12 [1979.06,1987.05]	0.00119	1975.07 [1960.02,1999.12]	1.00
PMEMP	3177.76 [124.70]	3551.04 [145.58]	2300.66 [223.15]	-35.21 [6.82]	1988.01 [1986.12,1992.01]	0.000119	1982.05 [1960.02,1999.12]	0.894
PMCP	4721.37 [199.92]	5083.05 [248.62]	4081.63 [330.65]	-19.70 [7.60]	1985.07 [1977.05,1999.12]	0.146	1991.07 [1960.02,1999.12]	1.00
HHSNTN	3914.23 [173.44]	2215.68 [235.35]	5321.04 [214.18]	140.15 [27.28]	1978.02 [1976.08,1978.04]	2.34E-017	1990.10 [1960.02,1999.12]	0.534
F6EDM	100.89 [4.49]	137.76 [9.65]	91.23 [4.94]	-33.78 [5.86]	1972.04 [1971.01,1978.03]	0.00412	1981.03 [1965.02,1999.12]	0.384
FTMC6	122.46 [5.16]	89.92 [10.25]	133.02 [5.84]	47.93 [18.07]	1973.02 [1968.06,1974.03]	0.00498	1972.04 [1970.09,1972.10]	8.92E-007
FTMM6	79.81 [3.70]	95.33 [4.47]	52.83 [5.89]	-44.59 [6.71]	1987.03 [1986.10,1990.03]	7.97E-009	1972.07 [1971.05,1974.10]	1.07E-013

Results for SupW tests for structural change in unconditional volatility for individual series when allowing for a single structural change in the unconditional mean, and SupW tests for structural change in the unconditional mean. The column headed σ_0 contains the estimate of the unconditional standard deviation under the null hypothesis of constant volatility. Columns headed σ_1 and σ_2 contain estimates of the unconditional standard deviation before and after the volatility break, respectively. The column headed $\Delta\sigma$ contains the percent change in standard deviation. The estimated break date for the variance (mean) is given in the column headed τ_v (τ_m), with the 90% confidence interval for the break date given in brackets. The column headed p-value_v (p-value_m) contains the asymptotic p -value of the corresponding SupW test. Figures in brackets below parameter estimates are standard errors.

Table A.3: Tests for nonlinearity in mean and tests for structural change in variance

Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
Production							
IP	7.71 [0.32]	8.88 [0.39]	5.42 [0.54]	-38.96 [6.65]	1986.06 [1985.06,1990.01]	9.86E-006	9.26E-018
IPP	7.94 [0.30]	8.42 [0.33]	5.84 [0.69]	-30.59 [8.67]	1992.07 [1990.12,1997.08]	0.00706	1.66E-017
IPF	8.61 [0.33]	9.04 [0.36]	6.74 [0.76]	-25.45 [8.91]	1992.07 [1989.07,1999.12]	0.0838	5.54E-017
IPC	10.28 [0.41]	11.68 [0.56]	8.78 [0.58]	-24.84 [6.09]	1980.09 [1977.08,1989.04]	0.00647	1.57E-008
IPCD	25.96 [1.20]	27.49 [1.58]	23.88 [1.85]	-13.12 [8.36]	1983.02 [1960.03,1999.12]	0.951	8.70E-010
IPCN	8.80 [0.31]	9.27 [0.35]	7.36 [0.61]	-20.66 [7.28]	1990.02 [1985.11,1999.07]	0.00422	2.55E-005
IPE	12.64 [0.49]	13.51 [0.53]	9.00 [1.10]	-33.37 [8.54]	1992.04 [1990.04,1996.05]	0.00254	1.96E-014
IPI	9.94 [0.38]	10.75 [0.41]	6.41 [0.86]	-40.39 [8.32]	1992.06 [1991.09,1995.05]	3.30E-007	2.23E-008
IPM	10.33 [0.44]	12.34 [0.52]	6.49 [0.72]	-47.38 [6.27]	1986.03 [1985.10,1988.08]	4.77E-010	3.44E-014
IPMD	14.70 [0.67]	18.07 [0.83]	9.61 [1.01]	-46.84 [6.11]	1984.01 [1983.08,1986.11]	9.11E-007	1.48E-019
IPMND	12.41 [0.52]	13.95 [0.65]	9.86 [0.84]	-29.35 [6.86]	1984.12 [1982.12,1991.11]	0.0289	0.000210
IPMFG	8.46 [0.36]	9.86 [0.45]	6.34 [0.56]	-35.72 [6.35]	1984.01 [1982.11,1988.07]	1.48E-005	2.46E-016
IPD	11.22 [0.50]	13.13 [0.63]	8.33 [0.78]	-36.54 [6.64]	1984.01 [1982.05,1988.06]	0.000702	5.69E-026
IPN	8.15 [0.32]	8.88 [0.36]	5.83 [0.65]	-34.36 [7.79]	1990.06 [1989.08,1994.11]	3.12E-005	2.16E-005
IPMIN	13.25 [0.57]	14.46 [0.69]	10.79 [0.99]	-25.38 [7.69]	1986.11 [1983.02,1996.04]	0.0131	0.00667
IPUT	18.44 [0.82]	14.28 [1.05]	24.00 [1.21]	68.06 [14.97]	1982.11 [1979.01,1983.09]	3.29E-014	0.0921
IPX	611.85 [28.92]	748.65 [39.39]	471.42 [39.91]	-37.03 [6.28]	1984.03 [1983.02,1988.04]	0.000492	2.86E-013
IPXMCA	690.61 [29.20]	808.22 [36.68]	513.27 [45.05]	-36.49 [6.27]	1984.01 [1982.12,1988.04]	0.000201	1.07E-014
IPXDCA	863.38 [42.21]	1048.74 [58.09]	677.05 [58.24]	-35.44 [6.60]	1984.01 [1982.05,1988.07]	0.00137	2.75E-017
IPXNCA	677.64 [29.14]	769.00 [34.08]	474.95 [50.76]	-38.24 [7.15]	1990.01 [1989.05,1993.04]	4.88E-006	0.000179
IPXMIN	1199.26 [57.15]	1381.07 [73.87]	951.22 [86.28]	-31.12 [7.25]	1986.06 [1984.07,1992.07]	0.00162	0.0428
IPXUT	1759.71 [83.65]	1424.41 [120.44]	2050.84 [112.23]	43.98 [14.50]	1982.11 [1976.04,1984.08]	0.000683	0.0431
GMPYQ	4.31 [0.19]	4.49 [0.21]	3.30 [0.49]	-26.46 [11.43]	1993.12 [1990.06,1999.12]	0.275	3.14E-012
GMYPXQ	4.20 [0.16]	3.50 [0.31]	4.44 [0.18]	26.70 [12.28]	1970.02 [1960.03,1975.07]	0.113	1.10E-016
(Un)employment							
LHEL	2403.62 [91.06]	1960.92 [105.51]	3303.03 [150.39]	68.44 [11.87]	1986.10 [1984.09,1987.09]	4.70E-008	8.18E-019
LHELX	47.56 [1.97]	63.86 [3.77]	41.86 [2.23]	-34.45 [5.22]	1970.05 [1969.01,1975.03]	0.0410	1.85E-010
LHEM	3.25 [0.14]	4.99 [0.36]	2.95 [0.15]	-40.95 [5.18]	1965.12 [1965.03,1969.12]	1.16E-005	4.90E-017
LHNAG	3.07 [0.12]	4.30 [0.31]	2.85 [0.13]	-33.66 [5.62]	1965.12 [1964.04,1969.11]	0.000220	2.46E-017
LHUR	190.51 [7.07]	253.97 [18.10]	179.46 [7.55]	-29.34 [5.85]	1965.12 [1963.05,1969.06]	0.00998	9.31E-023
LHU680	548.38 [22.16]	763.82 [55.74]	509.65 [23.63]	-33.28 [5.77]	1966.02 [1964.04,1970.04]	0.211	2.64E-005
LHU5	58.32 [2.33]	74.86 [4.55]	52.73 [2.65]	-29.56 [5.55]	1970.02 [1967.09,1975.07]	0.0283	2.14E-006
LHU14	60.51 [2.31]	72.87 [3.62]	52.59 [2.90]	-27.83 [5.36]	1975.08 [1973.02,1981.07]	0.00744	1.75E-015
LHU15	59.00 [2.27]	77.61 [4.22]	52.00 [2.59]	-33.00 [4.94]	1970.12 [1969.03,1974.08]	0.00245	7.64E-017
LHU26	90.97 [3.34]	116.38 [6.18]	81.21 [3.83]	-30.22 [4.96]	1971.02 [1969.01,1975.03]	0.000216	6.75E-015
LHU27	80.60 [3.19]	108.01 [4.81]	62.58 [3.90]	-42.06 [4.43]	1975.11 [1975.02,1978.04]	6.87E-008	3.80E-013
LHCH	244.64 [11.30]	226.10 [12.16]	339.22 [27.46]	50.03 [14.58]	1989.05 [1985.03,1991.07]	0.0621	0.0177

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Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{n1}
LPNAG	1.97 [0.08]	2.50 [0.10]	1.42 [0.11]	-43.09 [4.85]	1980.07 [1979.09,1982.10]	1.31E-009	4.81E-024
LP	2.28 [0.09]	2.82 [0.11]	1.45 [0.14]	-48.52 [5.43]	1984.02 [1983.07,1986.02]	1.31E-012	9.85E-023
LPGD	4.13 [0.18]	5.05 [0.22]	2.74 [0.27]	-45.60 [5.81]	1984.02 [1983.08,1986.10]	6.32E-010	4.86E-018
LPMI	10.21 [0.51]	11.75 [0.61]	7.12 [0.86]	-39.42 [7.99]	1986.09 [1985.07,1991.09]	0.0230	0.892
LPCC	10.26 [0.57]	13.99 [0.81]	7.07 [0.75]	-49.45 [6.07]	1978.06 [1977.11,1982.02]	2.27E-010	4.44E-010
LPED	3.98 [0.18]	4.77 [0.22]	2.76 [0.27]	-42.20 [6.31]	1984.03 [1983.08,1987.09]	0.00234	1.55E-015
LPEN	5.39 [0.26]	6.44 [0.33]	3.79 [0.41]	-41.26 [6.99]	1984.03 [1983.07,1988.09]	0.000578	1.67E-016
LPSP	3.01 [0.13]	3.95 [0.19]	2.29 [0.17]	-41.93 [5.03]	1977.04 [1976.08,1980.08]	0.000917	7.13E-007
LPTU	1.65 [0.06]	1.93 [0.08]	1.31 [0.09]	-31.79 [5.32]	1981.10 [1979.11,1985.07]	1.90E-007	1.44E-009
LPT	4.45 [0.27]	5.68 [0.38]	3.29 [0.37]	-42.04 [7.55]	1979.06 [1976.08,1984.04]	0.00388	4.59E-007
LPFR	2.57 [0.11]	3.02 [0.15]	2.11 [0.15]	-30.11 [6.21]	1980.06 [1978.11,1987.08]	8.15E-008	3.24E-013
LPS	2.11 [0.08]	1.22 [0.19]	2.27 [0.08]	86.23 [30.00]	1966.01 [1964.01,1966.06]	4.80E-005	0.00161
LPGOV	2.02 [0.08]	2.36 [0.10]	1.68 [0.11]	-29.00 [5.49]	1980.03 [1978.07,1985.12]	0.000173	1.39E-006
LW	2.80 [0.14]	3.26 [0.18]	2.11 [0.21]	-35.09 [7.46]	1983.11 [1982.01,1990.03]	0.000216	0.164
LPHRM	123.74 [6.76]	144.91 [8.96]	97.49 [9.98]	-32.72 [8.04]	1984.05 [1981.04,1991.09]	0.0248	2.04E-005
LPMOSA	245.44 [13.11]	293.55 [16.42]	170.31 [20.52]	-41.98 [7.71]	1984.05 [1983.07,1989.08]	9.13E-006	1.29E-006
	136.58 [7.05]	155.42 [9.33]	112.65 [10.52]	-27.52 [8.04]	1982.05 [1978.11,1994.07]	0.0548	8.18E-010

Wages and salaries

LEH	3.30 [0.13]	3.84 [0.15]	2.31 [0.21]	-39.79 [5.92]	1987.09 [1987.03,1990.04]	4.25E-012	0.132
LEHCC	6.34 [0.29]	6.85 [0.32]	3.98 [0.67]	-41.96 [10.21]	1992.10 [1991.06,1996.06]	0.000686	0.0121
LEHM	3.86 [0.17]	4.58 [0.22]	2.97 [0.25]	-35.16 [6.27]	1982.02 [1980.11,1987.03]	0.000537	0.289
LEHTU	4.92 [0.23]	5.67 [0.30]	4.01 [0.33]	-29.39 [6.97]	1984.02 [1983.01,1992.05]	6.36E-005	0.0188
LEHTT	3.33 [0.14]	3.83 [0.17]	2.43 [0.23]	-36.62 [6.60]	1987.06 [1986.05,1991.01]	8.33E-009	0.113
LEHFR	5.91 [0.26]	7.33 [0.29]	2.62 [0.44]	-64.30 [6.17]	1989.06 [1989.04,1990.07]	1.79E-018	0.00209
LEHS	3.99 [0.17]	4.70 [0.20]	2.65 [0.28]	-43.46 [6.33]	1987.12 [1987.08,1990.07]	1.74E-011	0.000292

Construction

HSFR	92.88 [3.72]	103.92 [4.62]	74.05 [6.03]	-28.74 [6.61]	1985.03 [1982.04,1991.02]	4.90E-005	0.483
HSNE	221.89 [8.59]	240.70 [10.94]	192.78 [13.61]	-19.91 [6.72]	1984.04 [1979.10,1997.11]	0.218	0.445
HSMW	182.02 [7.54]	192.93 [8.47]	143.20 [15.98]	-25.78 [8.90]	1991.03 [1988.06,1999.11]	0.00623	0.881
HSSOU	113.50 [4.61]	122.17 [5.87]	100.07 [7.31]	-18.09 [7.16]	1984.04 [1975.06,1999.12]	0.0758	0.822
HSWST	144.24 [5.29]	150.28 [6.67]	134.11 [8.64]	-10.76 [6.98]	1985.01 [1962.12,1999.12]	0.743	0.0521
HSBR	69.20 [2.98]	76.60 [3.29]	42.18 [6.28]	-44.94 [8.53]	1991.05 [1990.12,1994.05]	5.42E-007	0.509
HSBNE	133.85 [5.91]	153.75 [7.53]	104.59 [9.13]	-31.97 [6.81]	1984.03 [1981.12,1989.12]	0.00301	0.566
HSBMW	116.30 [5.60]	131.18 [6.30]	70.75 [11.03]	-46.06 [8.80]	1990.05 [1989.10,1993.10]	1.46E-008	0.621
HSBSOU	86.23 [3.53]	91.16 [3.98]	69.44 [7.35]	-23.83 [8.73]	1991.02 [1988.11,1999.12]	0.0729	0.437
HSBWST	101.58 [4.45]	109.00 [5.38]	86.04 [7.78]	-21.07 [8.13]	1987.05 [1982.11,1999.12]	0.178	0.713
HNS	85.61 [3.32]	76.86 [5.00]	92.38 [4.40]	20.20 [9.69]	1979.09 [1964.02,1988.05]	0.0299	0.579
HNSNE	215.07 [11.62]	148.01 [29.93]	226.71 [12.47]	53.18 [32.10]	1977.11 [1974.02,1979.02]	0.0152	0.550
HNSMW	160.44 [8.16]	169.23 [9.24]	130.72 [16.98]	-22.75 [10.88]	1994.01 [1990.02,1999.12]	0.414	0.278

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Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{n1}
HNSSOU	120.67 [5.52]	147.42 [8.31]	101.46 [7.04]	-31.18 [6.15]	1984.11 [1983.01,1988.11]	0.0118	0.619
HNSWST	149.72 [7.12]	156.99 [7.79]	115.89 [16.80]	-26.18 [11.31]	1995.05 [1993.03,1999.12]	0.252	0.589
HNR	589.25 [26.12]	631.76 [29.17]	434.73 [55.61]	-31.19 [9.36]	1992.03 [1989.12,1998.01]	0.0311	0.0422
HMOB	52.54 [2.30]	66.52 [3.06]	37.53 [3.17]	-43.59 [5.42]	1980.09 [1979.12,1983.08]	2.09E-008	0.00730
CONTC	17.86 [0.75]	21.27 [0.98]	13.75 [1.08]	-35.34 [5.89]	1984.02 [1982.09,1987.09]	7.97E-006	0.00104
CONPC	18.10 [0.81]	24.14 [1.31]	14.83 [0.96]	-38.58 [5.20]	1977.04 [1976.05,1980.11]	0.00212	0.000243
CONQC	36.16 [1.56]	41.40 [2.10]	30.13 [2.25]	-27.24 [6.57]	1983.09 [1980.03,1990.02]	0.0365	0.685
CONDO9	112.49 [4.57]	69.01 [10.97]	121.21 [4.91]	75.64 [28.81]	1966.09 [1963.10,1967.05]	9.57E-007	1.10E-008

Trade

MSMTQ	11.37 [0.42]	12.02 [0.46]	8.44 [0.98]	-29.76 [8.55]	1992.09 [1991.03,1997.11]	0.000216	4.60E-017
MSMQ	15.69 [0.60]	16.28 [0.66]	12.63 [1.50]	-22.41 [9.71]	1993.07 [1990.02,1999.12]	0.0539	2.72E-015
MSDQ	22.66 [0.88]	24.01 [0.97]	17.20 [1.95]	-28.39 [8.61]	1992.01 [1989.12,1998.02]	0.00293	1.26E-020
MSNQ	12.84 [0.49]	13.77 [0.70]	11.94 [0.69]	-13.29 [6.66]	1979.09 [1966.01,1999.12]	0.619	1.79E-005
WTQ	16.16 [0.63]	18.09 [0.74]	12.05 [1.08]	-33.38 [6.59]	1987.03 [1985.11,1991.07]	4.73E-008	3.13E-008
WTDQ	18.11 [0.69]	19.22 [0.75]	12.53 [1.67]	-34.81 [9.03]	1993.04 [1991.09,1997.01]	0.000236	7.13E-007
WTNQ	21.97 [0.89]	25.53 [1.17]	17.38 [1.32]	-31.94 [6.05]	1982.07 [1980.12,1987.10]	1.09E-006	0.00375
RTQ	13.41 [0.60]	15.54 [0.71]	8.92 [1.03]	-42.59 [7.11]	1987.02 [1986.05,1990.07]	1.78E-008	3.34E-007
RTDQ	28.98 [1.44]	33.08 [1.62]	16.43 [2.83]	-50.32 [8.88]	1990.02 [1989.11,1993.03]	3.11E-010	4.80E-005
RTNQ	10.28 [0.40]	13.36 [0.53]	7.21 [0.53]	-45.99 [4.49]	1979.12 [1979.05,1981.10]	1.16E-008	0.000307

Inventories

IVMTQ	4.32 [0.16]	4.88 [0.21]	3.41 [0.26]	-30.11 [6.10]	1984.08 [1982.09,1989.09]	0.000398	0.000226
IVMFGQ	4.96 [0.20]	5.50 [0.24]	3.88 [0.34]	-29.52 [6.81]	1986.09 [1984.09,1992.07]	0.0110	0.102
IVMFDQ	6.61 [0.25]	8.01 [0.38]	5.67 [0.32]	-29.24 [5.20]	1976.02 [1973.11,1981.02]	0.00121	0.0355
IVMFNQ	5.59 [0.21]	6.28 [0.24]	4.15 [0.35]	-34.02 [6.13]	1986.12 [1985.07,1990.06]	3.62E-007	0.982
IVVRQ	8.54 [0.34]	10.03 [0.43]	6.43 [0.51]	-35.90 [5.75]	1983.06 [1982.03,1987.02]	5.42E-005	0.279
IVRRQ	8.55 [0.34]	9.45 [0.39]	6.44 [0.61]	-31.82 [7.04]	1988.02 [1985.11,1992.09]	8.55E-006	4.20E-013
IVSRQ	16.40 [0.64]	17.41 [0.70]	11.85 [1.49]	-31.93 [8.99]	1992.09 [1991.06,1997.09]	0.000403	7.20E-006
IVSRMQ	25.14 [0.98]	26.33 [1.07]	18.92 [2.43]	-28.14 [9.69]	1993.07 [1991.12,1999.12]	0.00105	5.83E-006
IVSRWQ	20.86 [0.77]	15.18 [1.99]	21.85 [0.83]	43.97 [19.64]	1965.12 [1961.03,1968.02]	0.00627	1.39E-007
IVSRRQ	20.48 [0.92]	21.80 [1.00]	13.92 [2.24]	-36.13 [10.68]	1993.04 [1992.05,1998.07]	0.000118	0.704

Orders

MOCMQ	27.60 [1.06]	29.51 [1.16]	19.97 [2.32]	-32.33 [8.32]	1991.12 [1990.09,1996.07]	5.65E-006	2.53E-008
MDOQ	37.63 [1.37]	39.50 [1.48]	28.46 [3.29]	-27.96 [8.76]	1993.03 [1991.03,1998.09]	8.25E-005	1.81E-008
MSONDQ	84.98 [3.48]	50.63 [7.61]	93.48 [3.79]	84.66 [28.76]	1967.12 [1965.06,1968.07]	5.21E-006	1.75E-006
MO	22.59 [0.83]	23.64 [0.89]	17.12 [2.04]	-27.57 [9.07]	1993.07 [1991.05,1999.04]	7.80E-005	1.49E-005
MOWU	33.55 [1.20]	35.05 [1.30]	25.76 [2.98]	-26.51 [8.92]	1993.07 [1990.12,1999.06]	0.000629	3.91E-006
MDO	37.71 [1.37]	39.58 [1.49]	28.53 [3.31]	-27.91 [8.79]	1993.03 [1991.02,1998.10]	9.23E-005	7.48E-008
MDUWU	40.75 [1.47]	42.29 [1.61]	33.16 [3.56]	-21.58 [8.93]	1993.03 [1989.02,1999.12]	0.0288	3.57E-006
MNO	14.13 [0.55]	11.30 [0.99]	15.39 [0.66]	36.20 [13.23]	1972.05 [1965.08,1975.11]	0.0324	0.138

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Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
MNOU	22.35 [0.83]	24.11 [1.13]	20.34 [1.20]	-15.63 [6.36]	1981.04 [1971.04,1999.12]	0.339	0.00324
MU	11.76 [0.42]	14.49 [0.57]	9.22 [0.55]	-36.40 [4.58]	1979.04 [1978.05,1982.02]	0.0408	0.0327
MDU	12.20 [0.43]	15.10 [0.59]	9.49 [0.57]	-37.13 [4.49]	1979.04 [1978.06,1981.11]	0.0273	0.0535
MNU	21.07 [0.81]	24.43 [1.11]	17.59 [1.13]	-28.02 [5.67]	1980.05 [1978.01,1986.05]	0.0372	0.00198
MPCON	85.16 [3.31]	53.22 [7.25]	93.07 [3.61]	74.86 [24.77]	1967.12 [1965.04,1968.08]	1.16E-007	6.06E-006
MPCONQ	84.75 [3.25]	56.24 [7.14]	91.80 [3.55]	63.23 [21.67]	1967.12 [1964.10,1968.11]	1.63E-006	5.95E-007

Consumption

GMCQ	6.51 [0.25]	7.29 [0.30]	4.85 [0.44]	-33.47 [6.62]	1987.02 [1985.11,1991.07]	2.63E-005	6.02E-007
GMCDQ	31.36 [1.36]	34.27 [1.51]	20.89 [2.87]	-39.05 [8.78]	1991.04 [1990.08,1995.05]	0.000294	0.000145
GMCNQ	8.30 [0.32]	9.40 [0.38]	5.96 [0.55]	-36.52 [6.41]	1987.03 [1985.09,1990.06]	1.32E-007	4.51E-005
GMCSQ	3.89 [0.16]	2.74 [0.28]	4.37 [0.18]	59.56 [17.47]	1971.11 [1968.01,1972.07]	7.04E-006	2.96E-005
GMCANQ	86.68 [4.07]	94.38 [4.53]	58.24 [8.70]	-38.30 [9.69]	1991.06 [1990.10,1996.07]	0.00180	0.0120

Money and credit

FM1	5.66 [0.22]	3.87 [0.30]	7.33 [0.29]	89.57 [16.56]	1979.03 [1977.04,1979.08]	7.34E-007	0.656
FM2	3.85 [0.16]	2.17 [0.31]	4.36 [0.17]	100.38 [30.03]	1969.03 [1967.02,1969.07]	4.52E-008	0.921
FM3	4.30 [0.15]	2.41 [0.30]	4.84 [0.16]	100.92 [26.15]	1968.10 [1967.05,1969.03]	2.14E-007	0.759
FML	5.23 [0.19]	4.86 [0.21]	6.51 [0.39]	34.03 [9.92]	1989.12 [1983.05,1992.08]	0.0585	0.606
FM2DQ	4.76 [0.16]	5.23 [0.21]	4.10 [0.24]	-21.64 [5.57]	1983.03 [1979.05,1990.11]	0.0637	0.0544
FMFBA	3.33 [0.12]	4.49 [0.31]	3.13 [0.13]	-30.41 [5.67]	1965.12 [1963.10,1969.07]	0.429	0.663
FMBASE	4.43 [0.17]	3.94 [0.25]	4.90 [0.24]	24.54 [9.93]	1979.09 [1966.07,1986.03]	0.162	0.966
FMRRR	11.69 [0.43]	10.17 [0.54]	14.23 [0.69]	39.89 [10.04]	1985.01 [1980.05,1987.08]	0.00122	0.817
FMRNBA	18.46 [0.97]	10.10 [2.11]	20.56 [1.06]	103.52 [43.87]	1968.01 [1964.07,1968.03]	6.98E-005	0.0952
FMRNBC	15.83 [0.72]	10.08 [1.51]	17.42 [0.80]	72.78 [27.12]	1968.01 [1964.06,1968.08]	2.46E-007	0.0275
FCLS	4.47 [0.20]	4.27 [0.22]	5.63 [0.51]	31.96 [13.77]	1996.01 [1988.05,1999.05]	0.635	0.232
FCSGV	12.67 [0.59]	18.84 [1.49]	11.60 [0.62]	-38.43 [5.88]	1977.11 [1976.12,1980.10]	0.244	0.530
FCLRE	5.51 [0.23]	4.91 [0.27]	6.68 [0.38]	36.00 [10.81]	1991.03 [1986.12,1993.09]	0.494	0.0304
FCLIN	7.66 [0.33]	7.22 [0.35]	10.14 [0.83]	40.45 [13.36]	1996.01 [1992.03,1998.02]	0.441	0.00133
FCLNBF	20.51 [1.09]	19.27 [1.17]	27.50 [2.78]	42.73 [16.84]	1991.01 [1987.06,1993.06]	0.00932	0.803
FCLNQ	11.00 [0.42]	8.15 [0.80]	12.04 [0.49]	47.84 [15.77]	1970.09 [1966.02,1972.04]	0.0978	0.353
FCLBMC	35753.25 [2175.76]	12071.55 [2701.92]	58752.77 [2662.72]	386.70 [111.15]	1979.09 [1978.07,1979.10]	1.78E-012	0.0211
CCI30M	94.61 [4.74]	49.19 [6.74]	127.26 [5.72]	158.73 [37.32]	1974.12 [1973.04,1975.01]	2.90E-021	0.00288
CCINT	2837153.00 [196211.67]	691807.18 [416284.73]	3356552.52 [204829.55]	385.19 [293.45]	1979.11 [1979.10,1979.11]	1.44E-017	0.171
CCINV	1392774.62 [92143.14]	555053.54 [144546.48]	1814303.07 [102534.79]	226.87 [87.10]	1982.08 [1981.06,1982.09]	1.29E-017	0.174

Stock prices

FSNCOM	38.89 [1.59]	41.68 [1.78]	28.95 [3.36]	-30.54 [8.59]	1991.03 [1988.07,1996.10]	0.126	0.215
FSNIN	41.47 [1.89]	46.14 [2.16]	28.58 [3.59]	-38.05 [8.30]	1991.03 [1989.11,1994.10]	0.00280	0.122
FSNTR	59.05 [2.36]	64.78 [2.71]	43.42 [4.47]	-32.97 [7.44]	1991.02 [1989.06,1994.10]	0.00307	0.135
FSNUT	37.35 [1.42]	47.20 [2.64]	33.65 [1.62]	-28.71 [5.27]	1976.01 [1974.05,1980.12]	0.0975	0.382
FSNFI	54.44 [2.30]	65.15 [4.34]	50.36 [2.68]	-22.71 [6.59]	1976.02 [1970.07,1983.04]	0.389	0.197

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Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
FSPCOM	38.31 [1.56]	40.49 [1.76]	30.58 [3.31]	-24.48 [8.82]	1991.03 [1986.08,1999.12]	0.401	0.236
FSPIN	39.00 [1.60]	41.45 [1.80]	30.31 [3.39]	-26.87 [8.78]	1991.03 [1987.09,1998.08]	0.156	0.203
FSPCAP	45.58 [1.87]	48.18 [2.10]	36.45 [3.95]	-24.35 [8.84]	1991.02 [1986.06,1999.12]	0.194	0.0799
FSPTR	57.11 [2.47]	62.47 [2.91]	44.94 [4.39]	-28.06 [7.79]	1991.02 [1988.08,1996.06]	0.0191	0.499
FSPUT	38.13 [1.44]	43.12 [2.25]	34.79 [1.84]	-19.32 [6.00]	1976.01 [1971.05,1991.02]	0.398	0.982
FSPFI	58.76 [2.57]	62.17 [3.05]	50.79 [4.67]	-18.30 [8.51]	1991.04 [1982.08,1999.12]	0.764	0.376

Dividends and volume

FSDXP	40.82 [1.72]	33.76 [3.45]	43.13 [1.97]	27.77 [14.30]	1969.11 [1960.02,1975.05]	0.274	0.545
FSPXE	47.03 [1.89]	40.11 [3.78]	49.29 [2.16]	22.88 [12.78]	1969.11 [1960.02,1980.07]	0.340	0.00294
FSNVV3	38.26 [2.41]	65.70 [3.83]	25.88 [2.57]	-60.61 [4.54]	1982.01 [1981.11,1983.05]	3.37E-012	0.781

Interest rates

FYFF	466.22 [35.15]	593.17 [43.47]	255.34 [56.02]	-56.95 [9.96]	1984.12 [1984.10,1988.04]	0.00154	0.000195
FYCP	485.60 [32.43]	202.66 [60.09]	591.70 [36.80]	191.97 [88.46]	1970.04 [1968.09,1970.05]	0.000917	0.00131
FYGM3	412.84 [27.94]	520.25 [34.05]	224.57 [45.08]	-56.83 [9.11]	1985.06 [1985.04,1988.11]	0.0107	0.000428
FYGM6	418.25 [25.29]	512.81 [30.87]	252.51 [40.87]	-50.76 [8.50]	1985.06 [1985.04,1990.01]	0.00891	0.000325
FYGT1	455.00 [25.94]	204.72 [52.02]	531.38 [28.74]	159.56 [67.43]	1969.05 [1966.09,1969.06]	0.000464	0.00133
FYGT5	370.28 [17.76]	160.77 [34.55]	436.46 [19.42]	171.48 [59.58]	1969.08 [1967.11,1969.09]	1.15E-007	0.0346
FYGT10	312.36 [15.08]	193.67 [20.15]	426.67 [19.77]	120.31 [25.09]	1979.08 [1977.06,1979.11]	1.55E-011	0.126
FYAAAC	232.09 [12.44]	121.25 [16.28]	338.84 [15.98]	179.45 [39.77]	1979.08 [1977.11,1979.10]	1.01E-010	0.441
FYBAAC	217.71 [10.92]	122.08 [14.35]	309.82 [14.08]	153.77 [31.97]	1979.08 [1977.11,1979.10]	1.03E-013	0.862
FWAFIT	358.87 [21.21]	527.31 [32.30]	261.52 [24.56]	-50.41 [5.56]	1981.06 [1981.01,1983.03]	0.000169	0.0346
FYFHA	295.02 [17.42]	142.29 [22.86]	442.12 [22.43]	210.72 [52.35]	1979.08 [1977.10,1979.09]	1.33E-012	0.143

Exchange rates

EXRUS	20.82 [0.96]	13.02 [2.16]	22.62 [1.04]	73.66 [29.83]	1979.09 [1977.05,1980.06]	0.00870	0.769
EXRGER	31.81 [1.43]	22.29 [3.05]	34.38 [1.58]	54.23 [22.24]	1980.02 [1977.02,1981.09]	0.00512	0.674
EXRSW	35.76 [1.66]	28.08 [3.67]	37.69 [1.84]	34.23 [18.70]	1980.01 [1975.02,1985.09]	0.762	0.657
EXRJAN	33.38 [1.62]	23.96 [4.19]	35.01 [1.74]	46.14 [26.54]	1978.09 [1975.02,1981.03]	0.626	0.808
EXRUK	29.73 [1.47]	34.15 [1.64]	17.63 [2.72]	-48.37 [8.33]	1993.04 [1992.11,1995.03]	2.34E-008	0.874
EXRCAN	12.78 [0.54]	12.21 [0.64]	14.14 [0.99]	15.77 [10.14]	1992.08 [1977.01,1999.12]	0.780	0.392

Producer prices

PWFSA	5.30 [0.24]	6.21 [0.32]	4.28 [0.34]	-31.12 [6.50]	1981.04 [1978.08,1987.05]	0.0152	0.0981
PWFCSA	6.25 [0.28]	6.78 [0.31]	4.28 [0.60]	-36.90 [9.30]	1991.07 [1990.05,1996.04]	0.0105	0.129
PWIMSA	6.14 [0.30]	4.02 [0.52]	7.12 [0.35]	77.05 [24.67]	1972.08 [1968.04,1972.11]	0.0670	0.277
PWCMSA	22.43 [1.16]	13.19 [1.99]	26.77 [1.36]	103.00 [32.27]	1972.10 [1969.05,1972.12]	0.000591	0.164
PWFXSA	5.63 [0.29]	2.95 [0.71]	6.13 [0.31]	107.78 [51.10]	1973.01 [1970.07,1973.06]	0.00963	0.0242
PW160A	19.68 [0.88]	27.52 [1.70]	17.15 [0.97]	-37.69 [5.21]	1981.02 [1980.03,1983.06]	1.59E-005	0.00792
PW150A	18.86 [0.96]	27.09 [1.85]	16.10 [1.07]	-40.56 [5.65]	1981.04 [1980.06,1984.04]	0.000855	3.72E-006
PW561	56.42 [3.38]	29.20 [3.62]	107.29 [4.94]	267.41 [48.57]	1986.01 [1984.10,1986.02]	4.11E-008	0.389
PWCM	6.62 [0.28]	7.90 [0.37]	5.17 [0.39]	-34.49 [5.84]	1981.04 [1980.03,1986.03]	0.0427	0.0264

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Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
PWXFA	6.35 [0.32]	3.89 [0.82]	6.79 [0.35]	74.57 [37.91]	1972.11 [1969.01,1973.07]	0.0335	0.0786
PSM99Q	17.74 [0.69]	12.35 [1.23]	20.03 [0.80]	62.17 [17.43]	1971.12 [1968.09,1972.11]	3.35E-005	0.000168
PSCCOM	22.15 [0.95]	15.24 [1.64]	25.34 [1.11]	66.30 [19.36]	1972.08 [1968.11,1973.04]	0.000515	1.87E-005
PSCFOO	32.32 [1.46]	21.29 [2.51]	37.54 [1.73]	76.36 [22.29]	1972.11 [1969.04,1973.03]	0.000667	0.0419
PSCMAT	23.86 [0.88]	18.88 [1.54]	26.18 [1.05]	38.68 [12.64]	1972.09 [1967.02,1975.03]	0.0154	2.12E-008
PZFR	23.40 [1.15]	31.42 [2.52]	21.41 [1.25]	-31.86 [6.76]	1980.10 [1979.02,1985.04]	0.0418	1.05E-016
PCGOLD	51.99 [3.52]	84.75 [6.00]	37.97 [3.92]	-55.20 [5.61]	1983.03 [1982.11,1985.07]	0.00646	0.713

Consumer prices

PUNEW	3.32 [0.13]	4.16 [0.17]	2.14 [0.20]	-48.51 [5.16]	1983.04 [1982.10,1985.03]	0.00228	0.0431
PU81	4.88 [0.27]	6.70 [0.42]	3.65 [0.34]	-45.45 [6.11]	1980.11 [1980.08,1985.03]	0.00922	0.553
PUH	3.80 [0.18]	5.19 [0.24]	2.59 [0.23]	-50.16 [4.92]	1982.12 [1982.09,1985.01]	0.0246	0.00540
PU83	4.21 [0.18]	3.22 [0.21]	6.05 [0.28]	87.60 [14.93]	1986.01 [1983.11,1986.07]	2.72E-006	0.103
PU84	6.63 [0.31]	5.56 [0.44]	7.56 [0.41]	36.05 [13.14]	1978.08 [1967.04,1980.12]	0.149	0.107
PU85	3.30 [0.13]	4.22 [0.16]	2.18 [0.17]	-48.44 [4.51]	1981.11 [1981.07,1983.08]	2.47E-010	0.00382
PUC	4.06 [0.18]	2.98 [0.31]	4.57 [0.22]	53.25 [17.57]	1972.12 [1967.07,1974.04]	0.0415	0.108
PUCD	3.86 [0.16]	4.50 [0.20]	2.73 [0.26]	-39.42 [6.39]	1985.07 [1984.10,1989.02]	0.0152	0.0437
PUS	3.41 [0.15]	4.54 [0.18]	1.87 [0.22]	-58.86 [5.03]	1983.01 [1982.11,1984.08]	0.000136	0.00828
PUXF	3.36 [0.14]	4.18 [0.18]	2.20 [0.21]	-47.39 [5.44]	1983.04 [1982.09,1985.06]	0.00724	0.0182
PUXHS	3.41 [0.14]	4.11 [0.19]	2.59 [0.20]	-36.97 [5.78]	1981.07 [1980.01,1985.04]	0.0217	0.0357
PUXM	3.40 [0.15]	4.22 [0.18]	2.26 [0.21]	-46.46 [5.58]	1983.04 [1982.09,1985.09]	0.00651	0.0469
GMDC	2.73 [0.10]	3.30 [0.13]	1.98 [0.15]	-40.08 [5.01]	1982.09 [1981.11,1985.02]	0.0151	0.0229
GMDCD	3.59 [0.15]	4.13 [0.20]	2.97 [0.22]	-28.07 [6.34]	1981.07 [1978.12,1988.10]	0.184	0.0511
GMDCN	4.14 [0.18]	3.00 [0.30]	4.68 [0.21]	55.87 [17.25]	1972.12 [1968.02,1973.08]	0.0259	0.141
GMDCS	2.49 [0.09]	3.03 [0.11]	1.82 [0.12]	-39.79 [4.67]	1982.01 [1981.02,1984.02]	0.0190	0.00224

Miscellaneous

PMI	2819.56 [110.80]	3264.26 [137.06]	2100.27 [174.32]	-35.66 [5.98]	1984.09 [1983.04,1988.04]	0.000651	0.000520
PMP	4059.30 [169.67]	4652.28 [211.73]	3108.60 [268.10]	-33.18 [6.52]	1984.08 [1983.02,1989.10]	0.00167	0.00216
PMNO	4333.68 [182.60]	4695.51 [230.34]	3743.23 [294.24]	-20.28 [7.39]	1984.10 [1978.12,1999.09]	0.233	0.00914
PMDEL	3727.23 [178.27]	4737.12 [213.66]	2079.21 [272.94]	-56.11 [6.09]	1984.10 [1984.07,1986.10]	5.89E-012	0.0530
PMNV	3757.28 [147.22]	4288.80 [195.36]	3110.09 [215.57]	-27.48 [6.01]	1981.12 [1979.01,1988.03]	0.00388	0.00206
PMEMP	3111.59 [122.51]	3492.25 [142.77]	2217.17 [218.84]	-36.51 [6.78]	1988.01 [1986.12,1991.09]	2.98E-005	3.75E-010
PMCP	4612.46 [196.68]	5069.54 [289.49]	4227.46 [265.69]	-16.61 [7.08]	1978.04 [1967.11,1999.12]	0.238	5.24E-005
HHSNTN	3913.82 [174.23]	2207.51 [236.43]	5327.07 [215.17]	141.32 [27.62]	1978.02 [1976.08,1978.04]	7.83E-017	0.689
F6EDM	100.69 [4.52]	136.77 [9.71]	91.24 [4.97]	-33.29 [5.97]	1972.04 [1970.12,1978.07]	0.00441	0.689
FTMC6	125.76 [5.23]	136.18 [5.73]	83.93 [11.48]	-38.37 [8.82]	1991.06 [1990.09,1994.08]	2.75E-005	0.00193
FTMM6	78.94 [3.80]	95.64 [4.58]	49.90 [6.03]	-47.83 [6.79]	1987.03 [1986.11,1989.12]	2.22E-011	1.06E-007

Results for SupW tests for structural change in unconditional volatility for individual series when allowing for different unconditional means during expansions and recessions, and Wald tests for nonlinearity in the unconditional mean. The column headed σ_0 contains the estimate of the unconditional standard deviation under the null hypothesis. Columns headed σ_1 and σ_2 contain estimates of the unconditional standard deviation before and after the break, respectively. The column headed $\Delta\sigma$ contains the percent change in standard deviation. The estimated break date is given in the column headed τ_v , with the 90% confidence interval for the break date given in brackets. The column headed p-value_v contains the asymptotic p-value of the SupW test. The column headed p-value_{nl} contains the asymptotic p-value of the Wald test for nonlinearity in the unconditional mean. Figures in brackets below parameter estimates are standard errors.

Table A.4: Tests for nonlinearity and structural change in mean and tests for structural change in variance

Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}	τ_m	p-value _m
Production									
IP	7.63 [0.32]	8.95 [0.40]	5.60 [0.49]	-37.41 [6.15]	1984.03 [1983.03,1988.02]	7.61E-006	9.26E-018	1984.06 [1982.04,1993.06]	0.0154
IPP	7.82 [0.30]	8.81 [0.41]	6.78 [0.42]	-23.08 [5.98]	1980.08 [1975.08,1988.07]	0.00544	1.66E-017	1984.06 [1981.03,1991.09]	0.00101
IPF	8.48 [0.33]	8.90 [0.36]	6.66 [0.75]	-25.16 [8.98]	1992.07 [1989.03,1999.12]	0.0997	5.54E-017	1984.06 [1980.06,1992.11]	0.00183
IPC	10.10 [0.40]	11.44 [0.55]	8.67 [0.57]	-24.22 [6.22]	1980.09 [1977.05,1990.01]	0.00594	1.57E-008	1978.06 [1974.05,1987.09]	0.00233
IPCD	25.91 [1.20]	27.34 [1.54]	23.74 [1.90]	-13.15 [8.48]	1984.02 [1960.02,1999.12]	0.956	8.70E-010	1977.08 [1960.02,1999.12]	0.584
IPCN	8.58 [0.31]	9.05 [0.35]	7.15 [0.62]	-21.00 [7.50]	1990.02 [1985.09,1999.10]	0.00376	2.55E-005	1978.06 [1973.05,1985.06]	7.05E-008
IPE	12.56 [0.49]	13.39 [0.53]	9.07 [1.10]	-32.31 [8.63]	1992.04 [1990.02,1996.09]	0.00450	1.96E-014	1966.09 [1960.02,1973.08]	0.519
IPI	9.87 [0.37]	10.67 [0.41]	6.44 [0.85]	-39.65 [8.25]	1992.06 [1991.10,1995.05]	3.95E-006	2.23E-008	1987.07 [1984.03,1995.11]	0.00144
IPM	10.23 [0.44]	12.50 [0.54]	6.76 [0.67]	-45.93 [5.87]	1984.03 [1983.09,1986.11]	9.94E-010	3.44E-014	1984.05 [1981.07,1999.12]	0.265
IPMD	14.62 [0.67]	18.11 [0.82]	9.37 [1.01]	-48.28 [6.05]	1984.01 [1983.08,1986.09]	2.82E-007	1.48E-019	1993.08 [1988.12,1999.12]	0.256
IPMND	12.12 [0.52]	13.83 [0.65]	9.47 [0.81]	-31.56 [6.66]	1984.04 [1982.09,1990.04]	0.000971	0.000210	1983.10 [1982.01,1989.11]	0.000390
IPMFG	8.35 [0.36]	9.80 [0.45]	6.17 [0.55]	-37.04 [6.30]	1984.01 [1983.01,1988.04]	1.59E-005	2.46E-016	1984.06 [1981.10,1996.01]	0.0505
IPD	11.20 [0.50]	13.12 [0.63]	8.30 [0.77]	-36.77 [6.61]	1984.01 [1982.06,1988.05]	0.000482	5.69E-026	1984.08 [1973.12,1999.12]	0.342
IPN	7.93 [0.32]	8.75 [0.36]	5.46 [0.63]	-37.55 [7.60]	1990.01 [1989.05,1993.10]	6.85E-007	2.16E-005	1983.09 [1981.10,1989.05]	0.000122
IPMIN	13.04 [0.57]	14.25 [0.69]	10.56 [0.98]	-25.93 [7.76]	1986.11 [1982.12,1995.12]	0.00673	0.00667	1984.07 [1979.08,1994.09]	0.00589
IPUT	18.25 [0.82]	13.08 [1.14]	22.94 [1.09]	75.32 [17.46]	1979.01 [1975.08,1979.09]	6.32E-016	0.0921	1972.11 [1960.02,1975.05]	8.40E-008
IPX	603.61 [28.42]	740.52 [38.67]	463.07 [39.17]	-37.47 [6.22]	1984.03 [1983.04,1988.03]	0.000229	2.86E-013	1984.06 [1982.06,1993.07]	0.0296
IPXMCA	683.17 [29.07]	806.45 [36.41]	497.28 [44.71]	-38.34 [6.20]	1984.01 [1983.01,1987.11]	3.53E-005	1.07E-014	1984.06 [1980.12,1999.08]	0.139
IPXDCA	848.13 [42.12]	1067.30 [61.61]	675.05 [54.75]	-36.75 [6.30]	1982.02 [1980.07,1986.04]	0.000696	2.75E-017	1984.08 [1981.01,1997.04]	0.0421
IPXNCA	670.25 [28.87]	762.62 [33.73]	465.33 [50.24]	-38.98 [7.12]	1990.01 [1989.06,1993.03]	7.34E-007	0.000179	1983.09 [1979.11,1996.08]	0.104
IPXMIN	1191.61 [57.11]	1368.65 [73.89]	950.09 [86.30]	-30.58 [7.34]	1986.06 [1984.05,1992.10]	0.000822	0.0428	1984.07 [1973.04,1999.12]	0.465
IPXUT	1763.79 [83.20]	1430.51 [119.80]	2053.17 [111.64]	43.53 [14.33]	1982.11 [1976.04,1984.08]	0.000753	0.0431	1983.02 [1968.02,1999.12]	0.591
GMPYQ	4.18 [0.19]	3.51 [0.38]	4.41 [0.22]	25.57 [14.92]	1970.02 [1960.02,1982.12]	0.426	3.14E-012	1984.09 [1981.11,1991.03]	5.92E-005
GMYPXQ	4.10 [0.15]	3.38 [0.30]	4.34 [0.18]	28.41 [12.64]	1970.02 [1961.03,1975.07]	0.0511	1.10E-016	1984.09 [1981.08,1988.11]	0.00107
(Un)employment									
LHEL	2374.15 [90.73]	1957.02 [105.75]	3221.60 [150.74]	64.62 [11.77]	1986.10 [1984.05,1987.10]	2.17E-008	8.18E-019	1987.11 [1974.10,1992.11]	0.0745
LHELX	47.52 [1.95]	64.12 [3.72]	41.72 [2.20]	-34.94 [5.10]	1970.05 [1969.02,1974.12]	0.0350	1.85E-010	1978.10 [1971.10,1998.03]	0.226
LHEM	3.22 [0.14]	4.72 [0.30]	2.83 [0.15]	-40.02 [5.03]	1968.02 [1967.04,1972.04]	4.30E-005	4.90E-017	1989.01 [1986.04,1999.02]	0.000647
LHNAG	3.00 [0.12]	4.33 [0.30]	2.77 [0.13]	-35.95 [5.38]	1965.12 [1964.07,1969.04]	6.79E-005	2.46E-017	1984.06 [1981.12,1991.07]	5.29E-006
LHUR	189.70 [7.08]	210.33 [8.61]	150.80 [11.82]	-28.30 [6.34]	1986.02 [1983.08,1991.06]	0.00292	9.31E-023	1989.03 [1975.04,1999.12]	0.553
LHU680	546.22 [22.21]	762.73 [55.86]	507.29 [23.69]	-33.49 [5.78]	1966.02 [1964.05,1970.04]	0.190	2.64E-005	1967.06 [1960.02,1999.12]	0.707
LHU5	58.31 [2.33]	74.84 [4.55]	52.72 [2.64]	-29.56 [5.55]	1970.02 [1967.09,1975.07]	0.0279	2.14E-006	1965.12 [1960.02,1999.12]	1.00
LHU14	60.42 [2.31]	72.44 [3.62]	52.71 [2.90]	-27.24 [5.41]	1975.08 [1973.01,1981.12]	0.00836	1.75E-015	1966.04 [1960.02,1999.12]	0.867
LHU15	58.69 [2.27]	76.37 [4.23]	52.03 [2.60]	-31.87 [5.08]	1970.12 [1969.01,1975.01]	0.00395	7.64E-017	1966.07 [1960.02,1989.07]	0.564
LHU26	90.73 [3.34]	115.52 [6.19]	81.19 [3.84]	-29.72 [5.02]	1971.02 [1968.12,1975.05]	0.000296	6.75E-015	1966.07 [1960.02,1999.12]	0.724
LHU27	80.27 [3.19]	105.80 [4.72]	62.29 [3.96]	-41.13 [4.57]	1976.07 [1975.09,1979.02]	1.50E-007	3.80E-013	1969.02 [1960.02,1999.09]	0.526
LHCH	244.76 [11.29]	226.17 [12.14]	339.59 [27.42]	50.15 [14.56]	1989.05 [1985.03,1991.07]	0.0588	0.0177	1975.06 [1960.02,1995.02]	0.856

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Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}	τ_m	p-value _m
LPNAG	1.89 [0.08]	2.36 [0.09]	1.18 [0.11]	-50.08 [5.22]	1984.02 [1983.08,1985.11]	5.48E-011	4.81E-024	1985.03 [1984.07,1988.11]	0.00317
LP	2.21 [0.09]	2.76 [0.11]	1.38 [0.14]	-50.16 [5.42]	1984.02 [1983.09,1986.02]	9.99E-010	9.85E-023	1985.03 [1984.05,1990.11]	0.0284
LPGD	3.95 [0.17]	4.94 [0.21]	2.44 [0.26]	-50.63 [5.66]	1984.02 [1983.11,1986.05]	1.94E-009	4.86E-018	1984.07 [1984.01,1988.05]	0.000154
LPMI	10.11 [0.48]	11.60 [0.58]	7.11 [0.82]	-38.73 [7.73]	1986.09 [1985.05,1991.06]	0.00200	0.892	1981.07 [1979.05,1984.09]	0.0120
LPCC	10.17 [0.57]	13.78 [0.81]	7.09 [0.75]	-48.57 [6.21]	1978.06 [1977.11,1982.06]	1.76E-011	4.44E-010	1968.01 [1961.02,1999.12]	0.144
LPEM	3.65 [0.17]	4.60 [0.21]	2.18 [0.26]	-52.73 [6.15]	1984.03 [1983.11,1986.08]	5.34E-006	1.55E-015	1984.07 [1984.03,1987.03]	1.33E-006
LPED	5.01 [0.26]	6.23 [0.32]	3.12 [0.40]	-49.97 [6.93]	1984.03 [1983.10,1987.07]	7.00E-005	1.67E-016	1984.08 [1984.02,1988.02]	6.60E-005
LPEN	2.76 [0.13]	3.56 [0.16]	1.72 [0.19]	-51.70 [5.74]	1982.09 [1982.05,1985.02]	7.56E-006	7.13E-007	1984.04 [1983.11,1987.06]	1.63E-005
LPSP	1.54 [0.06]	1.87 [0.08]	1.15 [0.09]	-38.63 [5.27]	1981.10 [1980.09,1984.08]	1.06E-007	1.44E-009	1989.02 [1988.05,1991.04]	0.000710
LPTU	4.43 [0.27]	5.62 [0.38]	3.28 [0.37]	-41.55 [7.67]	1979.09 [1976.08,1984.09]	0.00596	4.59E-007	1975.12 [1960.02,1999.12]	0.142
LPT	2.40 [0.11]	2.92 [0.15]	1.86 [0.15]	-36.30 [6.16]	1980.06 [1979.07,1985.11]	0.000424	3.24E-013	1989.02 [1988.07,1991.06]	0.000606
LPFR	1.87 [0.06]	1.72 [0.07]	2.36 [0.13]	37.08 [9.36]	1990.08 [1986.06,1993.02]	0.412	0.00161	1987.07 [1986.12,1987.12]	9.80E-005
LPS	1.96 [0.08]	2.28 [0.10]	1.51 [0.12]	-33.78 [5.83]	1983.07 [1982.04,1987.10]	0.00160	1.39E-006	1990.03 [1988.04,1995.03]	0.0309
LPGOV	2.52 [0.13]	2.89 [0.15]	1.27 [0.27]	-56.19 [9.64]	1990.10 [1990.08,1993.08]	1.37E-008	0.164	1968.07 [1967.09,1969.07]	1.28E-007
LW	123.20 [6.76]	145.31 [8.93]	95.77 [9.95]	-34.09 [7.96]	1984.05 [1981.05,1990.12]	0.0168	2.04E-005	1971.09 [1965.02,1989.05]	0.0846
LPHRM	245.85 [13.08]	293.10 [16.40]	172.07 [20.49]	-41.29 [7.72]	1984.05 [1983.07,1989.10]	1.36E-005	1.29E-006	1968.04 [1960.02,1999.12]	0.846
LPMOSA	136.15 [7.06]	156.22 [9.33]	110.64 [10.52]	-29.18 [7.95]	1982.05 [1979.03,1993.01]	0.0304	8.18E-010	1993.04 [1960.02,1999.12]	0.966

Wages and salaries

LEH	2.76 [0.12]	3.26 [0.13]	1.28 [0.22]	-60.74 [7.00]	1991.03 [1991.01,1992.06]	2.37E-020	0.132	1983.01 [1982.09,1983.12]	4.23E-018
LEHCC	6.04 [0.29]	8.79 [0.73]	5.54 [0.31]	-36.96 [6.30]	1966.02 [1964.07,1971.05]	0.00200	0.0121	1982.12 [1981.06,1987.10]	3.93E-010
LEHM	3.56 [0.17]	4.47 [0.21]	2.44 [0.24]	-45.43 [5.93]	1982.02 [1981.05,1985.02]	1.09E-008	0.289	1983.02 [1982.08,1985.06]	1.75E-007
LEHTU	4.48 [0.21]	5.59 [0.27]	3.14 [0.30]	-43.87 [6.03]	1984.03 [1983.09,1987.04]	4.33E-007	0.0188	1981.06 [1980.12,1982.11]	1.80E-012
LEHTT	3.02 [0.12]	3.61 [0.17]	2.49 [0.17]	-31.15 [5.64]	1981.10 [1980.02,1986.06]	3.38E-006	0.113	1983.02 [1982.09,1984.02]	1.78E-015
LEHFR	5.88 [0.26]	7.36 [0.28]	2.43 [0.43]	-66.94 [6.02]	1989.06 [1989.04,1990.06]	1.45E-021	0.00209	1983.10 [1976.08,1999.12]	0.0190
LEHS	3.64 [0.16]	4.51 [0.18]	1.71 [0.27]	-62.08 [6.21]	1989.02 [1988.12,1990.05]	1.28E-021	0.000292	1983.05 [1982.10,1985.06]	1.98E-016

Construction

HSFR	93.02 [3.71]	104.02 [4.60]	74.25 [6.01]	-28.62 [6.58]	1985.03 [1982.04,1991.01]	3.78E-005	0.483	1966.10 [1960.02,1999.12]	0.744
HSNE	222.08 [8.57]	241.00 [10.91]	192.78 [13.58]	-20.01 [6.70]	1984.04 [1979.10,1997.08]	0.209	0.445	1966.10 [1960.02,1999.12]	0.944
HSMW	182.24 [7.53]	193.26 [8.45]	142.97 [15.94]	-26.02 [8.86]	1991.03 [1988.06,1999.08]	0.00577	0.881	1985.02 [1960.02,1999.12]	0.920
HSSOU	113.28 [4.61]	121.95 [5.88]	99.87 [7.32]	-18.10 [7.18]	1984.04 [1975.05,1999.12]	0.0890	0.822	1978.04 [1960.02,1999.12]	0.562
HSWST	143.80 [5.30]	149.53 [6.68]	134.21 [8.65]	-10.25 [7.04]	1985.01 [1960.06,1999.12]	0.791	0.0521	1966.10 [1960.02,1999.12]	0.629
HSBR	69.17 [2.98]	76.37 [3.28]	42.88 [6.27]	-43.86 [8.56]	1991.05 [1990.12,1994.07]	2.82E-006	0.509	1978.06 [1960.02,1999.12]	0.941
HSBNE	133.86 [5.91]	153.67 [7.52]	104.73 [9.12]	-31.85 [6.81]	1984.03 [1981.12,1990.01]	0.00335	0.566	1987.03 [1961.02,1999.12]	0.986
HSBMW	116.26 [5.60]	131.27 [6.32]	71.35 [10.93]	-45.65 [8.73]	1990.03 [1989.08,1993.08]	1.33E-008	0.621	1977.08 [1961.02,1999.12]	1.00
HSBSOU	86.16 [3.51]	90.82 [3.97]	70.26 [7.33]	-22.64 [8.75]	1991.02 [1988.08,1999.12]	0.125	0.437	1978.04 [1961.02,1999.12]	0.566
HSBWST	101.60 [4.43]	109.13 [5.36]	85.86 [7.75]	-21.32 [8.08]	1987.05 [1982.12,1999.12]	0.171	0.713	1966.11 [1961.02,1982.10]	0.856
HNS	85.22 [3.34]	76.73 [5.02]	91.78 [4.42]	19.62 [9.72]	1979.09 [1964.02,1988.12]	0.0126	0.579	1991.09 [1964.02,1999.12]	0.536
HNSNE	215.34 [11.59]	148.25 [29.85]	226.99 [12.44]	53.11 [31.95]	1977.11 [1974.02,1979.02]	0.0143	0.550	1995.09 [1974.02,1999.12]	0.965
HNSMW	159.75 [8.19]	168.44 [9.27]	130.37 [17.04]	-22.60 [10.98]	1994.01 [1990.01,1999.12]	0.436	0.278	1977.12 [1974.02,1999.12]	0.179

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Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}	τ_m	p-value _m
HNSSOU	120.34 [5.53]	146.49 [8.32]	101.56 [7.05]	-30.67 [6.22]	1984.11 [1982.12,1989.02]	0.0179	0.619	1978.05 [1974.02,1999.12]	0.190
HNSWST	149.15 [7.13]	156.11 [7.80]	116.74 [16.83]	-25.22 [11.41]	1995.05 [1993.01,1999.12]	0.303	0.589	1978.04 [1974.02,1999.03]	0.135
HNR	587.79 [26.12]	631.02 [29.15]	430.69 [55.57]	-31.75 [9.35]	1992.03 [1989.12,1997.10]	0.0292	0.0422	1990.04 [1965.07,1999.12]	0.385
HMOB	51.97 [2.30]	65.51 [3.07]	37.43 [3.18]	-42.86 [5.54]	1980.09 [1979.12,1983.11]	6.59E-008	0.00730	1972.11 [1961.08,1989.02]	0.0845
CONTC	17.85 [0.75]	21.21 [0.98]	13.81 [1.08]	-34.86 [5.90]	1984.02 [1982.09,1987.10]	4.67E-006	0.00104	1971.02 [1965.02,1999.12]	0.778
CONPC	17.95 [0.81]	27.59 [1.84]	15.84 [0.86]	-42.59 [4.92]	1971.04 [1970.08,1974.04]	0.00255	0.000243	1986.02 [1977.09,1999.12]	0.473
CONQC	36.24 [1.54]	41.50 [2.08]	30.20 [2.23]	-27.23 [6.49]	1983.09 [1980.04,1989.12]	0.0289	0.685	1978.02 [1965.02,1999.12]	0.390
CONDO9	112.35 [4.57]	69.23 [10.96]	121.00 [4.91]	74.77 [28.57]	1966.09 [1963.09,1967.05]	9.77E-007	1.10E-008	1984.05 [1960.02,1999.12]	0.239
Trade									
MSMTQ	11.33 [0.42]	11.94 [0.46]	8.58 [0.97]	-28.14 [8.62]	1992.09 [1991.02,1998.07]	0.000704	4.60E-017	1978.04 [1960.02,1999.12]	0.234
MSMQ	15.67 [0.60]	16.22 [0.65]	12.78 [1.49]	-21.22 [9.72]	1993.07 [1989.10,1999.12]	0.0552	2.72E-015	1977.03 [1960.02,1999.12]	0.233
MSDQ	22.67 [0.87]	27.61 [1.82]	21.24 [0.98]	-23.08 [6.20]	1969.01 [1964.05,1977.05]	0.00553	1.26E-020	1983.12 [1960.02,1999.12]	0.688
MSNQ	12.77 [0.49]	13.70 [0.69]	11.87 [0.68]	-13.37 [6.65]	1979.09 [1965.11,1999.12]	0.579	1.79E-005	1978.04 [1966.12,1994.12]	0.00883
WTQ	16.16 [0.62]	18.13 [0.74]	11.97 [1.08]	-33.97 [6.53]	1987.03 [1985.11,1991.04]	5.39E-008	3.13E-008	1980.10 [1960.02,1999.12]	0.487
WTDQ	18.06 [0.69]	19.16 [0.75]	12.55 [1.67]	-34.52 [9.06]	1993.04 [1991.08,1997.02]	0.000325	7.13E-007	1984.06 [1960.02,1999.12]	0.545
WTNQ	21.95 [0.89]	25.52 [1.16]	17.33 [1.32]	-32.11 [6.03]	1982.07 [1980.12,1987.09]	1.13E-006	0.00375	1981.01 [1960.02,1999.12]	0.329
RTQ	13.39 [0.60]	15.49 [0.71]	8.95 [1.03]	-42.22 [7.14]	1987.02 [1986.05,1990.08]	6.54E-008	3.34E-007	1973.02 [1960.02,1999.12]	0.613
RTDQ	28.97 [1.44]	33.03 [1.61]	16.55 [2.82]	-49.91 [8.89]	1990.02 [1989.11,1993.04]	9.02E-010	4.80E-005	1976.04 [1960.02,1999.12]	0.577
RTNQ	10.27 [0.40]	13.33 [0.53]	7.22 [0.53]	-45.84 [4.49]	1979.12 [1979.05,1981.10]	1.02E-008	0.000307	1965.12 [1960.02,1997.07]	0.550
Inventories									
IVMTQ	4.24 [0.16]	4.79 [0.20]	3.35 [0.25]	-30.13 [5.93]	1984.10 [1983.01,1989.08]	0.000209	0.000226	1969.10 [1967.10,1972.02]	0.0163
IVMFGQ	4.82 [0.18]	5.34 [0.22]	3.84 [0.30]	-28.15 [6.41]	1986.01 [1983.11,1991.10]	0.0122	0.102	1969.08 [1968.05,1970.12]	0.00255
IVMFDQ	6.44 [0.23]	7.19 [0.28]	5.03 [0.39]	-30.09 [6.08]	1986.02 [1984.05,1990.09]	0.00616	0.0355	1967.08 [1966.07,1969.05]	0.0186
IVMFNQ	5.47 [0.20]	6.09 [0.24]	4.20 [0.34]	-30.99 [6.25]	1986.12 [1985.04,1991.05]	1.08E-005	0.982	1969.09 [1966.07,1971.07]	0.000374
IVWRQ	8.47 [0.33]	9.86 [0.41]	6.16 [0.53]	-37.53 [5.93]	1984.12 [1983.10,1988.03]	1.27E-005	0.279	1979.07 [1974.07,1990.07]	0.119
IVRRQ	8.53 [0.33]	9.42 [0.39]	6.44 [0.60]	-31.64 [6.98]	1988.01 [1985.11,1992.09]	6.88E-006	4.20E-013	1986.04 [1978.12,1999.12]	0.191
IVSRQ	16.35 [0.64]	17.38 [0.70]	11.70 [1.48]	-32.71 [8.94]	1992.09 [1991.06,1997.06]	0.000396	7.20E-006	1969.12 [1960.02,1981.04]	0.307
IVSRMQ	24.98 [0.98]	26.16 [1.06]	18.85 [2.43]	-27.92 [9.75]	1993.07 [1991.10,1999.12]	0.00258	5.83E-006	1969.12 [1960.02,1982.12]	0.254
IVSRWQ	20.72 [0.78]	14.85 [2.00]	21.74 [0.83]	46.33 [20.46]	1965.12 [1961.07,1968.03]	0.00396	1.39E-007	1972.02 [1960.02,1991.06]	0.201
IVSRRQ	20.45 [0.92]	21.78 [1.00]	13.82 [2.23]	-36.56 [10.66]	1993.04 [1992.06,1998.05]	0.000151	0.704	1993.03 [1986.10,1999.12]	0.265
Orders									
MOCMQ	27.47 [1.05]	29.36 [1.16]	19.96 [2.32]	-32.00 [8.37]	1991.12 [1990.09,1996.09]	1.08E-005	2.53E-008	1984.01 [1968.05,1999.12]	0.281
MDOQ	37.74 [1.36]	39.58 [1.47]	28.67 [3.27]	-27.56 [8.68]	1993.03 [1991.02,1998.10]	8.36E-005	1.81E-008	1984.03 [1960.02,1999.12]	0.574
MSONDQ	84.76 [3.49]	49.98 [7.62]	93.36 [3.79]	86.80 [29.49]	1967.12 [1965.06,1968.07]	3.84E-006	1.75E-006	1979.03 [1960.02,1999.12]	0.597
MO	22.56 [0.81]	23.57 [0.88]	17.27 [2.01]	-26.72 [8.95]	1993.07 [1991.04,1999.07]	0.000280	1.49E-005	1984.03 [1976.01,1996.06]	0.00383
MOWU	33.49 [1.19]	34.89 [1.29]	26.15 [2.96]	-25.07 [8.92]	1993.07 [1990.09,1999.12]	0.000889	3.91E-006	1984.03 [1967.06,1999.12]	0.0248
MDO	37.84 [1.35]	39.64 [1.47]	28.96 [3.26]	-26.95 [8.66]	1993.03 [1991.02,1999.01]	9.01E-005	7.48E-008	1984.03 [1966.08,1999.12]	0.0421
MDUWU	40.77 [1.46]	42.23 [1.59]	33.60 [3.53]	-20.44 [8.88]	1993.03 [1988.10,1999.12]	0.0329	3.57E-006	1984.03 [1961.08,1999.12]	0.0569
MNO	13.93 [0.55]	11.60 [0.98]	14.98 [0.65]	29.18 [12.26]	1972.05 [1963.01,1977.12]	0.0850	0.138	1981.02 [1976.03,1988.05]	0.00144

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Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}	τ_m	p-value _m
MNOU	22.31 [0.82]	24.12 [1.11]	20.25 [1.19]	-16.05 [6.27]	1981.04 [1972.03,1998.12]	0.313	0.00324	1988.12 [1979.06,1999.12]	0.00314
MU	10.99 [0.40]	14.02 [0.55]	8.18 [0.53]	-41.69 [4.40]	1979.04 [1978.09,1981.07]	0.00150	0.0327	1984.05 [1983.10,1986.07]	0.000273
MDU	11.41 [0.42]	14.55 [0.57]	8.48 [0.55]	-41.74 [4.39]	1979.04 [1978.09,1981.07]	0.00135	0.0535	1984.05 [1983.09,1986.08]	0.000470
MNU	20.34 [0.81]	24.23 [1.11]	16.31 [1.13]	-32.70 [5.59]	1980.05 [1978.08,1984.11]	0.00471	0.00198	1987.10 [1986.01,1993.02]	0.0351
MPCON	85.04 [3.31]	53.04 [7.25]	92.96 [3.61]	75.26 [24.91]	1967.12 [1965.05,1968.08]	7.01E-008	6.06E-006	1979.03 [1960.02,1999.12]	0.209
MPCONQ	84.62 [3.25]	55.63 [7.14]	91.79 [3.55]	65.01 [22.13]	1967.12 [1964.11,1968.11]	8.23E-007	5.95E-007	1978.10 [1960.02,1999.12]	0.417

Consumption

GMCQ	6.45 [0.25]	7.24 [0.30]	4.79 [0.44]	-33.84 [6.65]	1987.02 [1985.12,1991.06]	1.24E-005	6.02E-007	1966.03 [1960.02,1975.07]	0.0517
GMCDQ	31.40 [1.35]	34.12 [1.50]	21.56 [2.85]	-36.81 [8.82]	1991.04 [1990.07,1995.11]	0.000934	0.000145	1986.09 [1960.02,1999.12]	0.211
GMCNQ	8.28 [0.32]	9.37 [0.38]	5.96 [0.55]	-36.39 [6.42]	1987.03 [1985.08,1990.06]	1.92E-007	4.51E-005	1966.07 [1960.02,1999.12]	0.594
GMCSQ	3.81 [0.15]	2.19 [0.34]	4.21 [0.17]	92.55 [30.48]	1968.01 [1965.09,1968.04]	2.04E-006	2.96E-005	1978.06 [1970.04,1981.06]	5.73E-007
GMCANQ	86.53 [4.06]	94.24 [4.51]	58.03 [8.67]	-38.42 [9.66]	1991.06 [1990.10,1996.06]	0.00252	0.0120	1986.09 [1960.02,1999.12]	0.117

Money and credit

FM1	5.21 [0.21]	4.04 [0.29]	6.30 [0.28]	56.15 [13.15]	1979.03 [1975.06,1980.04]	0.00297	0.656	1993.12 [1993.05,1994.07]	3.28E-006
FM2	3.39 [0.14]	1.87 [0.34]	3.67 [0.15]	96.25 [36.61]	1966.03 [1963.12,1966.08]	0.000173	0.921	1987.01 [1986.08,1987.09]	8.00E-007
FM3	3.76 [0.14]	2.05 [0.34]	4.08 [0.15]	98.58 [33.75]	1966.04 [1964.07,1966.09]	0.00101	0.759	1987.01 [1986.03,1987.08]	0.000895
FML	4.86 [0.18]	4.58 [0.20]	5.87 [0.37]	28.06 [9.85]	1990.04 [1982.08,1994.12]	0.0510	0.606	1987.01 [1985.11,1987.12]	0.000108
FM2DQ	4.35 [0.16]	3.01 [0.34]	4.73 [0.18]	57.41 [18.64]	1968.12 [1965.07,1969.11]	0.00553	0.0544	1977.04 [1975.09,1978.12]	2.18E-005
FMFBFA	3.07 [0.11]	2.91 [0.13]	3.51 [0.22]	20.86 [9.31]	1988.12 [1974.06,1998.02]	0.759	0.663	1967.08 [1966.11,1968.04]	1.16E-008
FMBASE	4.31 [0.17]	3.73 [0.24]	4.87 [0.24]	30.52 [10.52]	1979.09 [1970.03,1983.10]	0.0171	0.966	1969.07 [1966.10,1971.06]	1.71E-005
FMRRA	11.16 [0.40]	10.02 [0.55]	12.38 [0.57]	23.51 [8.83]	1980.09 [1969.10,1987.05]	0.0667	0.817	1993.12 [1993.02,1994.09]	1.64E-009
FMRNBA	17.90 [0.96]	10.27 [2.11]	19.81 [1.06]	92.97 [41.07]	1968.01 [1963.11,1968.04]	0.000483	0.0952	1993.12 [1993.05,1997.11]	6.14E-006
FMRNBC	15.82 [0.71]	10.16 [1.50]	17.39 [0.79]	71.21 [26.37]	1968.01 [1964.06,1968.07]	8.01E-008	0.0275	1984.05 [1975.03,1996.12]	0.189
FCLS	4.03 [0.20]	3.75 [0.22]	5.24 [0.47]	39.62 [14.99]	1995.02 [1986.02,1997.01]	0.450	0.232	1987.01 [1985.07,1988.07]	0.000467
FCSGV	11.99 [0.57]	15.08 [0.78]	9.11 [0.75]	-39.58 [5.86]	1986.07 [1985.09,1989.02]	0.00187	0.530	1994.04 [1993.08,1995.09]	0.00407
FCLRE	4.39 [0.21]	6.22 [0.46]	3.95 [0.23]	-36.50 [5.98]	1979.01 [1977.03,1980.05]	0.0575	0.0304	1990.07 [1990.01,1990.12]	3.03E-005
FCLIN	6.70 [0.29]	5.86 [0.35]	8.27 [0.48]	41.15 [11.84]	1990.12 [1987.06,1993.06]	0.284	0.00133	1986.02 [1985.07,1986.10]	0.000328
FCLNBF	19.42 [1.11]	16.31 [1.42]	23.77 [1.68]	45.75 [16.32]	1985.09 [1981.02,1988.01]	0.00113	0.803	1977.07 [1975.10,1978.08]	4.42E-007
FCLNQ	10.70 [0.42]	7.25 [0.78]	11.96 [0.47]	65.04 [18.98]	1970.09 [1967.07,1971.05]	8.85E-005	0.353	1969.12 [1966.06,1970.09]	0.0660
FCLBMC	35717.34 [2175.81]	11969.27 [2699.60]	58781.31 [2660.44]	391.10 [112.97]	1979.09 [1978.07,1979.10]	1.89E-012	0.0211	1991.08 [1960.02,1999.12]	0.610
CCI30M	94.20 [4.74]	48.49 [6.74]	127.07 [5.71]	162.08 [38.29]	1974.12 [1973.05,1975.01]	5.29E-022	0.00288	1989.09 [1960.02,1995.09]	0.889
CCINT	2845896.57 [195445.95]	714487.63 [414810.88]	3361921.89 [204104.35]	370.54 [274.67]	1979.11 [1979.10,1979.11]	1.16E-017	0.171	1989.01 [1976.02,1995.09]	1.00
CCINV	1390320.75 [92161.43]	553720.53 [144622.65]	1811285.19 [102588.82]	227.11 [87.42]	1982.08 [1981.06,1982.09]	1.24E-017	0.174	1990.03 [1976.02,1995.09]	0.736

Stock prices

FSNCOM	38.89 [1.58]	41.67 [1.76]	28.99 [3.33]	-30.42 [8.52]	1991.03 [1988.08,1996.10]	0.101	0.215	1978.03 [1960.02,1999.12]	0.290
FSNIN	41.12 [1.90]	46.19 [2.16]	27.13 [3.58]	-41.26 [8.23]	1991.03 [1990.01,1994.03]	0.000923	0.122	1994.12 [1987.06,1999.12]	0.184
FSNTR	58.60 [2.36]	64.29 [2.70]	43.07 [4.46]	-33.00 [7.49]	1991.02 [1989.06,1994.11]	0.00473	0.135	1975.09 [1967.02,1991.09]	0.655
FSNUT	36.60 [1.42]	46.83 [2.65]	32.75 [1.63]	-30.06 [5.27]	1976.01 [1974.06,1980.08]	0.0823	0.382	1994.12 [1992.04,1999.08]	0.00483
FSNFI	53.99 [2.31]	58.13 [2.67]	42.41 [4.46]	-27.04 [8.37]	1991.04 [1987.08,1997.07]	0.290	0.197	1994.12 [1982.01,1999.12]	0.664

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Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}	τ_m	p-value _m
FSPCOM	38.25 [1.54]	40.35 [1.73]	30.79 [3.27]	-23.70 [8.75]	1991.03 [1986.11,1999.12]	0.361	0.236	1984.07 [1974.06,1998.10]	0.0873
FSPIN	38.90 [1.58]	41.29 [1.78]	30.38 [3.36]	-26.41 [8.72]	1991.03 [1987.11,1998.11]	0.124	0.203	1984.07 [1974.06,1998.10]	0.0285
FSPCAP	45.38 [1.86]	48.27 [2.09]	35.24 [3.93]	-26.99 [8.73]	1991.02 [1987.06,1998.05]	0.110	0.0799	1993.10 [1986.10,1999.12]	0.0669
FSPTR	56.86 [2.47]	62.17 [2.92]	44.80 [4.40]	-27.94 [7.85]	1991.02 [1988.07,1996.07]	0.0251	0.499	1979.02 [1971.02,1999.12]	0.913
FSPUT	37.97 [1.43]	43.08 [2.24]	34.55 [1.83]	-19.80 [5.96]	1976.01 [1971.05,1990.01]	0.487	0.982	1975.04 [1963.01,1999.12]	0.351
FSPFI	58.30 [2.57]	62.22 [3.05]	49.13 [4.65]	-21.04 [8.42]	1991.04 [1984.08,1999.12]	0.632	0.376	1994.12 [1985.10,1999.12]	0.317
Dividends and volume									
FSDXP	40.62 [1.71]	34.09 [3.42]	42.75 [1.96]	25.39 [13.84]	1969.11 [1960.02,1975.10]	0.334	0.545	1984.07 [1973.03,1997.07]	0.0431
FSPXE	46.89 [1.82]	39.46 [3.65]	49.32 [2.08]	24.98 [12.70]	1969.11 [1960.02,1975.12]	0.325	0.00294	1966.11 [1963.11,1968.10]	0.00491
FSNVV3	37.87 [2.40]	65.70 [3.78]	25.30 [2.54]	-61.49 [4.46]	1982.01 [1981.11,1983.04]	2.05E-011	0.781	1984.01 [1982.05,1997.07]	0.000132
Interest rates									
FYFF	467.26 [34.76]	602.49 [42.83]	242.63 [55.20]	-59.73 [9.60]	1984.12 [1984.10,1987.07]	0.00130	0.000195	1984.08 [1983.12,1999.12]	0.0725
FYCP	483.94 [32.20]	216.75 [59.87]	584.13 [36.66]	169.49 [76.34]	1970.04 [1968.06,1970.05]	0.00287	0.00131	1984.07 [1982.07,1997.08]	0.150
FYGM3	413.72 [27.67]	522.81 [33.67]	222.49 [44.58]	-57.44 [8.96]	1985.06 [1985.04,1988.05]	0.0106	0.000428	1984.08 [1983.06,1999.12]	0.133
FYGM6	418.34 [25.03]	516.19 [30.48]	246.83 [40.35]	-52.18 [8.31]	1985.06 [1985.04,1989.08]	0.0147	0.000325	1984.08 [1982.11,1999.12]	0.125
FYGT1	454.10 [25.68]	222.67 [51.72]	524.73 [28.57]	135.65 [56.22]	1969.05 [1966.04,1969.07]	0.00226	0.00133	1984.06 [1982.01,1999.12]	0.128
FYGT5	367.54 [17.57]	172.26 [34.36]	429.24 [19.31]	149.18 [50.95]	1969.08 [1967.08,1969.09]	1.94E-006	0.0346	1984.06 [1979.06,1995.08]	0.123
FYGT10	309.72 [14.89]	199.24 [20.04]	416.12 [19.67]	108.85 [23.21]	1979.08 [1977.03,1979.12]	7.47E-010	0.126	1984.06 [1979.03,1993.05]	0.105
FYAAAC	232.36 [12.19]	129.36 [16.11]	331.57 [15.81]	156.32 [34.17]	1979.08 [1977.09,1979.10]	1.05E-008	0.441	1984.06 [1979.07,1993.04]	0.0968
FYBAAC	219.08 [10.60]	130.72 [14.03]	304.18 [13.77]	132.69 [27.11]	1979.08 [1977.08,1979.10]	2.93E-011	0.862	1984.07 [1979.06,1991.01]	0.177
FWAFIT	352.77 [20.91]	519.92 [30.70]	247.32 [24.38]	-52.43 [5.47]	1981.11 [1981.07,1983.06]	1.99E-005	0.0346	1990.03 [1989.07,1994.04]	0.0511
FYFHA	300.66 [16.98]	157.88 [22.45]	438.18 [22.03]	177.55 [41.86]	1979.08 [1977.08,1979.09]	8.62E-010	0.143	1984.05 [1976.05,1994.12]	0.128
Exchange rates									
EXRUS	20.63 [0.95]	13.36 [2.14]	22.31 [1.03]	66.91 [27.86]	1979.09 [1977.02,1980.10]	0.0314	0.769	1985.03 [1976.06,1992.09]	0.567
EXRGER	31.85 [1.40]	24.34 [3.00]	33.88 [1.56]	39.22 [18.29]	1980.02 [1975.09,1982.10]	0.0244	0.674	1985.02 [1975.05,1994.08]	0.695
EXRSW	35.47 [1.64]	27.19 [3.63]	37.55 [1.82]	38.09 [19.62]	1980.01 [1975.02,1984.03]	0.422	0.657	1978.10 [1975.02,1981.11]	0.175
EXRJAN	33.18 [1.61]	24.30 [4.15]	34.71 [1.72]	42.88 [25.40]	1978.09 [1975.02,1981.02]	0.628	0.808	1995.04 [1987.05,1999.12]	0.798
EXRUK	29.47 [1.44]	33.73 [1.61]	17.82 [2.66]	-47.18 [8.28]	1993.04 [1992.11,1995.04]	1.30E-009	0.874	1985.02 [1979.06,1989.11]	0.500
EXRCAN	12.62 [0.54]	11.90 [0.64]	14.33 [0.99]	20.40 [10.53]	1992.08 [1982.07,1999.12]	0.504	0.392	1985.03 [1976.07,1995.05]	0.478
Producer prices									
PWFSA	5.23 [0.23]	6.27 [0.30]	4.04 [0.32]	-35.50 [6.02]	1981.04 [1979.05,1985.06]	5.41E-005	0.0981	1982.12 [1981.05,1987.05]	0.0139
PWFCSA	6.15 [0.27]	6.78 [0.30]	3.95 [0.57]	-41.77 [8.81]	1991.03 [1990.05,1994.10]	0.000413	0.129	1981.06 [1979.02,1986.10]	0.0398
PWIMSA	6.01 [0.29]	6.61 [0.33]	3.83 [0.62]	-41.97 [9.82]	1991.04 [1990.11,1995.11]	0.0531	0.277	1981.06 [1979.12,1986.10]	0.00525
PWCMSA	22.33 [1.15]	13.67 [1.98]	26.39 [1.35]	92.97 [29.60]	1972.10 [1969.01,1972.12]	0.00258	0.164	1984.03 [1970.11,1994.01]	0.181
PWFXSA	5.37 [0.27]	5.99 [0.31]	3.71 [0.50]	-38.04 [8.93]	1991.03 [1990.05,1995.09]	0.00524	0.0242	1981.06 [1980.06,1983.02]	0.00136
PW160A	19.25 [0.88]	26.28 [1.71]	16.97 [0.97]	-35.40 [5.60]	1981.02 [1979.12,1984.01]	0.000395	0.00792	1980.11 [1978.05,1987.11]	0.116
PW150A	18.13 [0.96]	26.67 [1.83]	15.28 [1.06]	-42.72 [5.58]	1981.04 [1980.07,1984.01]	0.000156	3.72E-006	1995.04 [1993.12,1997.11]	0.179
PW561	52.63 [3.30]	26.15 [3.54]	102.11 [4.83]	290.45 [55.95]	1986.01 [1984.10,1986.02]	9.99E-009	0.389	1990.04 [1986.03,1990.09]	6.07E-007
PWCM	6.39 [0.27]	7.94 [0.36]	4.76 [0.37]	-40.00 [5.41]	1980.07 [1979.10,1983.12]	0.00378	0.0264	1983.02 [1982.02,1987.03]	1.09E-005

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Series	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}	τ_m	p-value _m
PWXFA	5.86 [0.30]	8.36 [0.63]	5.17 [0.33]	-38.10 [6.10]	1974.11 [1973.08,1979.06]	0.402	0.0786	1981.07 [1980.11,1982.12]	1.78E-013
PSM99Q	17.33 [0.69]	13.26 [1.23]	19.06 [0.81]	43.78 [14.71]	1971.12 [1966.07,1973.12]	0.00588	0.000168	1984.03 [1980.10,1989.08]	0.255
PSCCOM	21.56 [0.91]	16.19 [1.60]	24.03 [1.08]	48.41 [16.11]	1972.08 [1966.11,1973.11]	0.0194	1.87E-005	1984.06 [1982.10,1987.08]	0.000115
PSCFOO	31.87 [1.42]	22.49 [2.44]	36.31 [1.68]	61.44 [19.07]	1972.11 [1968.03,1973.06]	0.00664	0.0419	1984.01 [1981.11,1988.08]	0.00182
PSCMAT	23.19 [0.86]	19.82 [1.51]	24.76 [1.03]	24.92 [10.87]	1972.09 [1961.07,1978.06]	0.107	2.12E-008	1984.06 [1982.03,1987.08]	4.13E-005
PZFR	20.93 [1.01]	25.36 [2.16]	19.71 [1.13]	-22.25 [7.98]	1981.03 [1976.11,1991.01]	0.241	1.05E-016	1985.08 [1985.02,1986.06]	1.72E-027
PCGOLD	50.69 [3.35]	81.83 [5.72]	37.36 [3.74]	-54.34 [5.57]	1983.03 [1982.11,1985.06]	0.00307	0.713	1980.09 [1980.01,1984.01]	0.0413

Consumer prices

PUNEW	3.16 [0.13]	2.23 [0.22]	3.60 [0.15]	61.42 [17.32]	1973.01 [1969.05,1973.12]	0.0739	0.0431	1967.05 [1966.01,1967.11]	5.31E-009
PU81	4.56 [0.26]	7.01 [0.41]	3.26 [0.30]	-53.46 [5.10]	1979.02 [1978.11,1981.10]	1.38E-005	0.553	1981.03 [1980.11,1984.01]	8.75E-005
PUH	3.10 [0.17]	4.71 [0.22]	1.67 [0.21]	-64.51 [4.69]	1983.01 [1982.11,1984.04]	3.22E-005	0.00540	1981.07 [1981.03,1982.08]	0.000145
PU83	4.05 [0.17]	3.24 [0.20]	5.57 [0.28]	71.92 [13.69]	1986.01 [1983.01,1986.09]	0.000113	0.103	1993.02 [1991.08,1994.04]	2.08E-012
PU84	6.65 [0.30]	5.84 [0.43]	7.37 [0.40]	26.23 [11.62]	1978.08 [1960.04,1982.06]	0.250	0.107	1984.05 [1977.12,1990.10]	0.0167
PU85	3.16 [0.11]	3.89 [0.14]	2.27 [0.16]	-41.50 [4.57]	1981.11 [1981.05,1984.01]	9.86E-005	0.00382	1966.02 [1965.06,1966.11]	1.01E-015
PUC	4.07 [0.17]	4.45 [0.19]	2.69 [0.36]	-39.57 [8.43]	1991.03 [1990.06,1994.11]	0.00130	0.108	1981.07 [1979.03,1985.05]	1.59E-005
PUCD	3.75 [0.15]	4.59 [0.19]	2.45 [0.23]	-46.70 [5.49]	1984.05 [1983.12,1986.08]	6.28E-006	0.0437	1984.09 [1984.03,1987.07]	0.000474
PUS	3.43 [0.14]	4.32 [0.17]	2.23 [0.20]	-48.43 [5.03]	1982.12 [1982.09,1985.01]	0.00624	0.00828	1966.02 [1964.12,1966.10]	1.96E-009
PUXF	3.26 [0.13]	3.81 [0.17]	2.48 [0.20]	-34.85 [5.96]	1983.04 [1981.11,1987.06]	0.178	0.0182	1966.03 [1965.02,1966.09]	7.26E-010
PUXHS	3.37 [0.13]	3.81 [0.18]	2.87 [0.19]	-24.82 [6.19]	1981.03 [1977.04,1989.03]	0.325	0.0357	1967.05 [1965.10,1968.03]	3.22E-008
PUXM	3.38 [0.13]	3.94 [0.17]	2.61 [0.20]	-33.67 [5.84]	1983.04 [1982.01,1987.08]	0.142	0.0469	1967.04 [1965.11,1967.12]	7.28E-008
GMDC	2.53 [0.10]	1.63 [0.16]	2.97 [0.11]	82.67 [19.71]	1973.01 [1970.12,1973.09]	0.00909	0.0229	1967.05 [1966.04,1967.11]	2.94E-009
GMDCD	3.34 [0.15]	4.02 [0.19]	2.55 [0.21]	-36.49 [6.01]	1981.07 [1980.04,1986.01]	0.00393	0.0511	1993.11 [1993.06,1994.12]	1.92E-005
GMDCN	3.98 [0.17]	4.34 [0.19]	2.70 [0.36]	-37.81 [8.78]	1991.03 [1990.03,1995.06]	0.00664	0.141	1981.03 [1979.05,1984.02]	0.00105
GMDCS	2.19 [0.09]	1.42 [0.14]	2.61 [0.10]	83.49 [19.06]	1974.01 [1972.01,1974.10]	0.00860	0.00224	1967.08 [1966.11,1967.12]	7.76E-014

Miscellaneous

PMI	2817.12 [110.28]	3255.53 [136.49]	2108.00 [173.59]	-35.25 [5.98]	1984.09 [1983.04,1988.05]	0.000720	0.000520	1967.04 [1960.02,1989.08]	0.849
PMP	4058.30 [169.06]	4652.43 [210.93]	3105.75 [267.07]	-33.24 [6.49]	1984.08 [1983.02,1989.09]	0.00136	0.00216	1967.04 [1960.02,1995.06]	0.885
PMNO	4328.08 [182.57]	4680.84 [230.37]	3752.42 [294.29]	-19.83 [7.42]	1984.10 [1978.09,1999.12]	0.255	0.00914	1967.02 [1960.02,1999.12]	0.996
PMDEL	3697.65 [178.13]	4690.09 [213.93]	2078.12 [273.28]	-55.69 [6.17]	1984.10 [1984.07,1986.11]	7.62E-012	0.0530	1979.04 [1973.02,1999.12]	0.489
PMNV	3737.15 [147.60]	4290.79 [195.60]	3063.04 [215.83]	-28.61 [5.99]	1981.12 [1979.03,1987.09]	0.00229	0.00206	1983.12 [1961.12,1999.12]	0.417
PMEMP	3105.22 [122.35]	3478.32 [142.71]	2228.56 [218.75]	-35.93 [6.82]	1988.01 [1986.12,1991.11]	3.82E-005	3.75E-010	1967.04 [1960.02,1999.12]	0.940
PMCP	4606.03 [196.13]	5075.34 [288.60]	4210.72 [264.87]	-17.04 [7.04]	1978.04 [1968.07,1999.12]	0.306	5.24E-005	1984.03 [1960.02,1999.12]	0.893
HHSNTN	3913.13 [173.67]	2206.91 [235.51]	5326.30 [214.33]	141.35 [27.53]	1978.02 [1976.08,1978.04]	4.24E-017	0.689	1992.01 [1960.02,1999.12]	0.601
F6EDM	101.10 [4.48]	138.63 [9.62]	91.27 [4.93]	-34.16 [5.79]	1972.04 [1971.01,1977.11]	0.00349	0.689	1971.03 [1965.02,1999.12]	0.345
FTMC6	121.01 [4.96]	131.03 [5.47]	83.22 [10.61]	-36.49 [8.52]	1991.02 [1990.02,1994.06]	0.000113	0.00193	1977.07 [1976.02,1979.09]	4.14E-007
FTMM6	77.83 [3.59]	92.99 [4.34]	51.47 [5.73]	-44.65 [6.68]	1987.03 [1986.10,1990.02]	4.72E-011	1.06E-007	1978.02 [1976.09,1981.06]	5.32E-019

Results for SupW tests for structural change in unconditional volatility for individual series when allowing for nonlinearity and a single structural change during expansions in the unconditional mean. Wald tests for nonlinearity in the unconditional mean and SupW tests for structural change during expansions in the unconditional mean. The column headed σ_0 contains the estimate of the unconditional standard deviation under the null hypothesis. Columns headed σ_1 and σ_2 contain estimates of the unconditional standard deviation before and after the volatility break, respectively. The column headed $\Delta\sigma$ contains the percent change in standard deviation. The estimated break date for the variance (mean during expansions) is given in the column headed τ_v (τ_m), with the 90% confidence interval for the break date given in brackets. The column headed p-value_v (p-value_m) contains the asymptotic p-value of the corresponding SupW test. The column headed p-value_{nl} contains the asymptotic p-value of the Wald test for nonlinearity during expansions in the unconditional mean. Figures in brackets below parameter estimates are standard errors.

Table A.5: Tests for structural change in expansion volatility

Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{pl}
Production								
IP	16.57 [0.34]	7.61 [0.14]	9.13 [0.49]	5.68 [0.56]	-37.82 [6.96]	1984.03 [1983.02,1989.08]	2.39E-006	2.73E-006
IPP	14.58 [0.32]	7.80 [0.13]	8.38 [0.39]	5.70 [0.74]	-31.97 [9.35]	1992.07 [1990.11,1998.10]	0.00303	4.91E-006
IPF	14.79 [0.34]	8.43 [0.14]	8.92 [0.42]	6.65 [0.80]	-25.44 [9.65]	1992.07 [1989.01,1999.12]	0.0929	4.76E-006
IPC	14.10 [0.37]	10.05 [0.15]	11.35 [0.60]	8.31 [0.69]	-26.82 [7.20]	1984.08 [1981.08,1994.02]	0.00621	0.0142
IPCD	36.73 [0.64]	24.80 [0.26]	26.12 [1.92]	23.45 [1.94]	-10.25 [9.94]	1980.12 [1960.02,1999.12]	1.00	0.00131
IPCN	9.10 [0.32]	8.84 [0.13]	9.41 [0.39]	7.29 [0.65]	-22.60 [7.60]	1990.02 [1985.12,1999.04]	0.00349	0.801
IPE	22.16 [0.41]	12.37 [0.17]	13.20 [0.62]	9.47 [1.16]	-28.29 [9.43]	1992.04 [1988.10,1999.12]	0.0369	9.06E-005
IPI	15.83 [0.37]	9.62 [0.15]	10.53 [0.50]	6.38 [0.95]	-39.39 [9.46]	1992.06 [1991.10,1997.01]	6.34E-006	0.00673
IPM	21.42 [0.40]	10.07 [0.16]	12.66 [0.67]	6.77 [0.75]	-46.50 [6.58]	1984.03 [1983.08,1987.10]	5.98E-009	9.74E-006
IPMD	31.96 [0.48]	14.31 [0.19]	17.76 [1.00]	10.00 [1.11]	-43.67 [7.02]	1984.01 [1983.06,1988.08]	5.67E-006	2.90E-009
IPMND	21.98 [0.43]	11.54 [0.17]	13.11 [0.80]	9.51 [0.90]	-27.48 [8.18]	1984.04 [1981.08,1996.12]	0.00224	0.0170
IPMFG	18.72 [0.36]	8.22 [0.14]	9.78 [0.56]	6.27 [0.62]	-35.85 [7.33]	1984.01 [1982.11,1990.09]	4.80E-005	1.60E-006
IPD	24.36 [0.42]	10.95 [0.17]	12.79 [0.77]	8.66 [0.86]	-32.28 [7.88]	1984.01 [1981.08,1992.09]	0.00815	1.05E-009
IPN	13.04 [0.34]	7.89 [0.14]	8.77 [0.43]	5.51 [0.70]	-37.14 [8.58]	1990.01 [1989.01,1995.04]	3.85E-008	0.0235
IPMIN	15.04 [0.43]	13.06 [0.17]	14.50 [0.77]	10.52 [1.02]	-27.48 [8.00]	1986.11 [1983.02,1996.04]	0.00952	0.383
IPUT	15.86 [0.52]	18.82 [0.21]	13.50 [1.20]	24.25 [1.21]	79.60 [18.36]	1980.12 [1977.06,1981.08]	2.10E-010	0.229
IPX	1311.48 [3.28]	595.08 [1.37]	749.48 [49.96]	471.40 [44.72]	-37.10 [7.29]	1984.03 [1983.02,1990.05]	0.000364	2.23E-005
IPXMCA	1419.85 [3.22]	672.73 [1.30]	804.32 [44.97]	508.06 [50.30]	-36.83 [7.18]	1984.01 [1982.11,1990.02]	9.35E-005	7.83E-006
IPXDCA	1785.43 [3.98]	816.76 [1.66]	1016.46 [74.13]	660.70 [65.53]	-35.00 [8.00]	1984.01 [1981.12,1991.06]	0.000874	4.56E-007
IPXNCA	1087.65 [3.27]	652.65 [1.37]	750.56 [40.79]	463.02 [56.78]	-38.31 [8.27]	1990.01 [1989.02,1994.09]	4.92E-007	0.0279
IPXMIN	1545.13 [4.44]	1148.90 [1.86]	1292.50 [75.52]	870.77 [105.11]	-32.63 [9.03]	1990.01 [1988.06,1997.04]	0.00491	0.0752
IPXUT	1533.91 [5.37]	1796.39 [2.24]	1338.84 [145.66]	2070.02 [112.65]	54.61 [18.81]	1980.12 [1975.07,1982.05]	0.00150	0.190
GMPYQ	6.82 [0.25]	4.24 [0.10]	4.64 [0.27]	3.60 [0.34]	-22.45 [8.60]	1986.03 [1979.07,1999.12]	0.271	5.10E-005
GMYPXQ	7.52 [0.24]	4.23 [0.09]	4.51 [0.23]	3.77 [0.30]	-16.39 [7.83]	1986.03 [1972.07,1999.12]	0.384	3.55E-005
(Un)employment								
LHEL	3341.48 [5.74]	2402.54 [2.31]	1897.86 [130.75]	3284.05 [172.80]	73.04 [15.00]	1986.10 [1984.05,1988.04]	1.88E-007	0.0233
LHELX	84.30 [0.84]	47.37 [0.34]	60.18 [3.89]	40.42 [2.86]	-32.84 [6.44]	1973.11 [1971.07,1981.04]	0.109	0.0124
LHEM	4.54 [0.22]	3.28 [0.09]	3.87 [0.20]	2.48 [0.23]	-36.04 [6.91]	1984.08 [1983.04,1990.02]	1.01E-006	0.00949
LHNAG	4.73 [0.20]	3.06 [0.08]	3.50 [0.18]	2.46 [0.20]	-29.66 [6.81]	1984.08 [1982.04,1991.09]	2.09E-006	0.000340
LHUR	337.61 [1.66]	178.53 [0.67]	244.03 [23.40]	167.14 [9.75]	-31.51 [7.69]	1965.12 [1961.12,1971.04]	0.0236	2.67E-006
LHU680	541.80 [2.70]	554.18 [1.09]	732.86 [60.93]	521.92 [25.89]	-28.78 [6.89]	1966.02 [1963.02,1973.08]	0.532	0.882
LHU5	59.21 [0.87]	59.00 [0.35]	74.68 [5.06]	53.98 [2.86]	-27.72 [6.22]	1969.03 [1965.10,1976.06]	0.0967	0.981
LHU14	74.76 [0.88]	62.32 [0.35]	78.07 [4.92]	56.79 [2.91]	-27.25 [5.91]	1969.10 [1966.09,1976.12]	0.0595	0.194
LHU15	94.27 [0.88]	59.17 [0.36]	76.76 [4.87]	52.76 [2.94]	-31.27 [5.80]	1970.12 [1968.04,1976.02]	0.0116	0.000445
LHU26	106.15 [1.06]	92.78 [0.43]	117.82 [6.93]	83.44 [4.24]	-29.18 [5.50]	1971.02 [1968.05,1976.02]	0.00199	0.299
LHU27	102.51 [1.04]	82.09 [0.42]	110.39 [5.44]	63.93 [4.36]	-42.09 [4.87]	1976.07 [1975.09,1979.06]	3.31E-006	0.143
LHCH	177.77 [1.86]	255.84 [0.81]	234.55 [13.36]	358.08 [29.27]	52.67 [15.21]	1989.05 [1985.05,1991.08]	0.0431	2.56E-005

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<i>continued from previous page</i>								
Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
LPNAG	5.28 [0.17]	2.00 [0.07]	2.57 [0.12]	1.22 [0.14]	-52.46 [5.92]	1984.11 [1984.06,1987.02]	2.61E-010	5.80E-010
LP	6.07 [0.19]	2.32 [0.08]	2.96 [0.15]	1.43 [0.17]	-51.65 [6.23]	1984.11 [1984.07,1987.06]	3.88E-010	1.27E-008
LPGD	10.84 [0.26]	4.05 [0.10]	5.27 [0.28]	2.42 [0.32]	-54.00 [6.60]	1984.07 [1984.04,1987.06]	1.57E-013	2.78E-007
LPMI	15.26 [0.40]	9.38 [0.16]	6.23 [1.00]	10.62 [0.63]	70.54 [29.20]	1971.06 [1965.07,1973.05]	0.00562	0.0557
LPCC	16.64 [0.43]	10.24 [0.17]	17.12 [1.30]	8.40 [0.67]	-50.92 [5.43]	1968.02 [1967.07,1972.08]	2.38E-007	0.00356
LPED	10.65 [0.26]	3.73 [0.11]	4.94 [0.29]	2.12 [0.33]	-57.11 [7.14]	1984.07 [1984.04,1987.07]	7.69E-009	9.60E-007
LPEN	14.19 [0.31]	5.15 [0.13]	6.70 [0.41]	3.08 [0.47]	-53.98 [7.55]	1984.07 [1984.02,1988.03]	4.84E-007	4.89E-008
LPSP	6.36 [0.22]	2.78 [0.09]	3.98 [0.24]	1.91 [0.20]	-51.93 [5.89]	1977.06 [1976.11,1980.10]	2.73E-008	0.00447
LPTU	3.11 [0.15]	1.62 [0.06]	1.83 [0.08]	0.87 [0.15]	-52.25 [8.20]	1992.07 [1992.01,1994.07]	4.26E-010	2.27E-005
LPT	5.72 [0.30]	4.62 [0.12]	5.86 [0.41]	3.49 [0.39]	-40.40 [7.92]	1979.06 [1976.01,1985.02]	0.0169	0.159
LPFR	4.52 [0.20]	2.55 [0.08]	3.07 [0.16]	1.83 [0.19]	-40.59 [6.97]	1984.11 [1984.02,1989.07]	2.83E-007	3.49E-005
LPS	2.37 [0.16]	2.16 [0.06]	1.10 [0.21]	2.35 [0.09]	114.73 [41.43]	1966.01 [1964.05,1966.05]	3.37E-006	0.556
LPGOV	2.92 [0.16]	2.00 [0.06]	2.41 [0.12]	1.65 [0.11]	-31.67 [5.77]	1979.03 [1977.05,1984.09]	0.000297	0.00656
LPHRM	4.47 [0.21]	2.52 [0.09]	2.81 [0.17]	1.61 [0.30]	-42.79 [11.12]	1991.09 [1991.06,1997.11]	0.000304	0.00161
LW	191.23 [1.54]	118.39 [0.61]	135.46 [9.87]	100.94 [9.98]	-25.48 [9.15]	1984.05 [1978.01,1999.08]	0.105	0.0158
LPMOSA	356.75 [2.07]	229.08 [0.83]	287.24 [20.23]	176.82 [19.17]	-38.44 [7.96]	1979.05 [1975.11,1985.11]	5.55E-005	0.0267
	181.08 [1.55]	127.16 [0.62]	148.60 [11.39]	107.89 [10.79]	-27.40 [9.15]	1979.05 [1974.04,1997.06]	0.231	0.0606

Wages and salaries

LEH	3.83 [0.21]	3.25 [0.08]	3.82 [0.17]	2.34 [0.21]	-38.62 [6.23]	1987.09 [1987.01,1990.12]	1.27E-008	0.230
LEHCC	8.46 [0.31]	6.07 [0.12]	8.39 [0.59]	5.22 [0.36]	-37.80 [6.08]	1971.01 [1968.11,1975.07]	0.00207	0.0257
LEHM	5.09 [0.23]	3.69 [0.09]	4.27 [0.25]	3.08 [0.26]	-27.91 [7.39]	1981.05 [1977.06,1991.04]	0.0346	0.0334
LEHTU	4.87 [0.29]	5.01 [0.11]	5.90 [0.34]	4.12 [0.34]	-30.08 [7.04]	1984.02 [1982.11,1992.06]	0.000246	0.846
LEHTT	3.93 [0.23]	3.25 [0.09]	3.77 [0.19]	2.45 [0.24]	-34.99 [7.13]	1987.06 [1985.12,1992.03]	6.40E-007	0.208
LEHFR	7.28 [0.31]	5.76 [0.12]	7.26 [0.32]	2.66 [0.46]	-63.38 [6.56]	1989.06 [1989.03,1990.10]	1.58E-015	0.206
LEHS	5.44 [0.24]	3.89 [0.10]	4.49 [0.22]	2.77 [0.30]	-38.37 [7.23]	1988.11 [1988.05,1992.12]	4.14E-007	0.0109

Construction

HSFR	135.88 [1.09]	85.94 [0.44]	97.05 [5.05]	69.96 [6.06]	-27.91 [7.28]	1985.03 [1981.06,1993.05]	0.00293	4.48E-006
HSNE	297.29 [1.67]	209.38 [0.67]	226.29 [12.15]	187.60 [13.79]	-17.10 [7.55]	1984.04 [1976.08,1999.12]	0.498	0.000495
HSMW	209.34 [1.57]	177.61 [0.63]	190.96 [9.40]	140.94 [15.58]	-26.20 [8.93]	1990.02 [1984.03,1999.01]	0.0197	0.255
HSSOU	160.19 [1.22]	105.89 [0.49]	113.07 [6.48]	96.64 [7.36]	-14.53 [8.15]	1984.04 [1966.07,1999.12]	0.488	0.000597
HSWST	179.57 [1.31]	139.00 [0.53]	135.25 [6.74]	148.02 [10.45]	9.44 [9.45]	1989.03 [1960.02,1999.12]	0.955	0.0116
HSBR	99.00 [0.98]	64.45 [0.39]	72.03 [3.61]	42.86 [6.10]	-40.50 [8.98]	1990.05 [1989.09,1995.02]	5.83E-006	0.0205
HSBNE	152.84 [1.48]	131.12 [0.56]	150.73 [8.35]	106.43 [9.37]	-29.39 [7.34]	1984.03 [1981.01,1992.04]	0.0378	0.359
HSBMW	157.29 [1.44]	110.40 [0.54]	124.63 [6.80]	70.21 [11.42]	-43.66 [9.66]	1990.05 [1989.07,1995.01]	2.32E-007	0.0887
HSBSOU	114.89 [1.14]	82.32 [0.43]	87.31 [4.35]	68.75 [7.17]	-21.26 [9.10]	1990.02 [1986.04,1999.12]	0.210	0.00612
HSBWST	141.23 [1.28]	96.04 [0.48]	101.85 [5.81]	85.24 [7.92]	-16.31 [9.12]	1987.05 [1977.05,1999.12]	0.493	0.0238
HNS	124.36 [1.09]	79.83 [0.42]	81.99 [3.82]	69.77 [8.26]	-14.90 [10.83]	1994.06 [1987.07,1999.12]	0.268	0.0112
HNSNE	249.31 [2.16]	209.45 [0.88]	164.75 [21.97]	230.33 [15.01]	39.81 [20.75]	1984.02 [1976.08,1990.11]	0.0270	0.542
HNSMW	226.99 [1.80]	149.13 [0.73]	101.21 [24.92]	155.65 [9.20]	53.79 [38.94]	1977.11 [1974.02,1981.10]	0.00584	0.0176

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Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
HNSSOU	165.08 [1.48]	113.41 [0.60]	136.37 [9.74]	100.93 [7.18]	-25.99 [7.46]	1984.11 [1981.03,1992.06]	0.0939	0.0102
HNSWST	213.13 [1.67]	139.03 [0.68]	127.35 [9.41]	159.16 [12.36]	24.98 [13.40]	1991.10 [1976.03,1999.12]	0.459	0.0240
HNR	1083.44 [2.99]	516.84 [1.17]	543.08 [28.91]	394.38 [62.46]	-27.38 [12.13]	1994.06 [1990.12,1999.12]	0.254	0.000991
HMOB	93.66 [0.85]	47.93 [0.34]	60.23 [3.26]	35.75 [3.24]	-40.65 [6.27]	1980.09 [1979.06,1984.12]	1.01E-007	0.000342
CONTC	27.91 [0.52]	16.99 [0.21]	20.47 [1.12]	13.39 [1.14]	-34.56 [6.62]	1984.06 [1982.09,1989.06]	9.64E-005	0.00232
CONPC	29.99 [0.54]	17.69 [0.21]	23.95 [1.47]	14.59 [1.04]	-39.08 [5.72]	1977.04 [1976.03,1981.07]	0.00786	0.00108
CONQC	46.69 [0.74]	34.55 [0.30]	40.45 [2.35]	29.02 [2.28]	-28.28 [7.01]	1983.09 [1979.12,1990.11]	0.0885	0.0442
CONDO9	131.72 [1.23]	110.37 [0.50]	74.86 [11.69]	118.02 [5.42]	57.66 [25.66]	1966.12 [1961.12,1968.05]	2.51E-005	0.264

Trade

MSMTQ	15.59 [0.38]	11.55 [0.15]	12.30 [0.53]	8.76 [1.02]	-28.74 [8.88]	1992.09 [1991.01,1999.07]	0.00119	0.0169
MSMQ	20.94 [0.45]	15.86 [0.18]	17.36 [0.97]	14.46 [0.94]	-16.71 [7.11]	1979.09 [1968.10,1999.12]	0.0404	0.00379
MSDQ	28.34 [0.55]	23.14 [0.22]	26.17 [1.42]	20.38 [1.35]	-22.13 [6.67]	1979.06 [1973.04,1991.01]	0.00643	0.0461
MSNQ	16.44 [0.40]	12.75 [0.16]	13.66 [0.73]	11.70 [0.78]	-14.36 [7.29]	1983.04 [1970.11,1999.12]	0.543	0.0223
WTQ	17.87 [0.46]	16.09 [0.19]	18.51 [0.85]	11.63 [1.15]	-37.14 [6.84]	1987.03 [1985.12,1991.05]	2.80E-007	0.464
WTDQ	24.27 [0.48]	17.90 [0.20]	19.16 [0.85]	12.68 [1.74]	-33.84 [9.55]	1993.04 [1991.04,1998.05]	0.00107	0.0460
WTNQ	24.59 [0.54]	21.62 [0.22]	25.49 [1.31]	17.41 [1.37]	-31.69 [6.42]	1981.07 [1979.07,1987.11]	4.28E-007	0.418
RTQ	17.55 [0.45]	12.94 [0.18]	15.23 [0.80]	8.77 [1.08]	-42.38 [7.70]	1987.02 [1986.04,1991.07]	9.62E-007	0.0317
RTDQ	40.86 [0.69]	27.51 [0.28]	31.71 [1.79]	15.97 [2.96]	-49.64 [9.75]	1990.02 [1989.10,1994.03]	1.50E-006	0.00521
RTNQ	11.80 [0.36]	10.18 [0.15]	13.52 [0.58]	6.97 [0.57]	-48.48 [4.72]	1979.12 [1979.05,1981.11]	2.84E-008	0.105

Inventories

IVMTQ	6.22 [0.23]	4.16 [0.09]	4.77 [0.24]	3.32 [0.28]	-30.37 [6.73]	1984.10 [1982.08,1991.05]	0.00207	0.000796
IVMFGQ	6.23 [0.25]	4.82 [0.10]	5.41 [0.27]	3.89 [0.34]	-28.00 [7.19]	1986.01 [1983.05,1994.01]	0.0372	0.0277
IVMFDQ	7.93 [0.29]	6.53 [0.12]	7.39 [0.33]	4.97 [0.45]	-32.84 [6.75]	1987.02 [1985.04,1991.12]	0.00477	0.0925
IVMFNQ	6.39 [0.26]	5.46 [0.10]	6.23 [0.27]	4.07 [0.36]	-34.71 [6.42]	1986.12 [1985.05,1990.12]	1.38E-006	0.0829
IVWRQ	12.09 [0.33]	7.98 [0.13]	9.25 [0.46]	6.20 [0.54]	-33.00 [6.74]	1984.12 [1982.12,1990.07]	0.000231	0.0160
IVRRQ	11.88 [0.34]	8.42 [0.14]	9.41 [0.45]	6.40 [0.64]	-32.00 [7.55]	1988.01 [1985.06,1993.10]	3.64E-005	0.000513
IVSRQ	21.34 [0.46]	16.25 [0.19]	17.34 [0.78]	12.18 [1.52]	-29.72 [9.31]	1992.09 [1991.02,1999.10]	0.00186	0.0126
IVSRMQ	33.42 [0.57]	24.81 [0.23]	26.06 [1.20]	19.38 [2.51]	-25.61 [10.22]	1993.07 [1991.06,1999.12]	0.00234	0.00725
IVSRWQ	24.15 [0.50]	20.79 [0.20]	13.81 [2.14]	22.00 [0.89]	59.37 [25.59]	1965.12 [1962.04,1967.07]	3.18E-005	0.191
IVSRRQ	26.30 [0.55]	19.55 [0.22]	20.90 [1.09]	13.95 [2.23]	-33.25 [11.22]	1993.04 [1991.12,1999.12]	0.00196	0.0826

Orders

MOCMQ	37.24 [0.60]	26.95 [0.24]	35.18 [2.45]	24.51 [1.33]	-30.33 [6.16]	1968.09 [1965.06,1973.10]	5.47E-005	0.0285
MDOQ	51.47 [0.68]	36.32 [0.27]	38.12 [1.68]	28.96 [3.39]	-24.04 [9.50]	1993.03 [1989.12,1999.12]	0.00176	0.00160
MSONDQ	94.33 [1.06]	84.66 [0.43]	53.40 [8.08]	92.78 [4.12]	73.77 [27.40]	1967.12 [1964.07,1968.11]	0.000107	0.466
MO	30.29 [0.52]	21.84 [0.21]	22.91 [0.99]	17.16 [2.07]	-25.11 [9.60]	1993.07 [1990.07,1999.12]	0.00125	0.00174
MOWU	44.03 [0.63]	32.42 [0.25]	33.91 [1.44]	25.93 [3.01]	-23.52 [9.44]	1993.07 [1989.08,1999.12]	0.00582	0.00130
MDO	50.13 [0.68]	36.39 [0.27]	38.24 [1.67]	28.84 [3.37]	-24.58 [9.41]	1993.03 [1990.03,1999.12]	0.00108	0.000823
MDUWU	52.99 [0.69]	39.55 [0.28]	41.05 [1.77]	33.44 [3.57]	-18.53 [9.38]	1993.03 [1986.09,1999.12]	0.110	0.000663
MNO	19.21 [0.42]	13.42 [0.17]	10.58 [1.05]	14.69 [0.70]	38.87 [15.33]	1972.05 [1964.11,1976.05]	0.0133	0.0140

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Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
MNOU	24.76 [0.52]	22.22 [0.21]	23.88 [1.23]	20.46 [1.27]	-14.32 [6.90]	1981.04 [1967.09,1999.12]	0.508	0.307
MU	17.56 [0.37]	11.33 [0.15]	14.00 [0.62]	8.95 [0.59]	-36.11 [5.06]	1979.04 [1978.01,1982.08]	0.0556	0.00287
MDU	17.79 [0.37]	11.76 [0.15]	14.57 [0.64]	9.26 [0.60]	-36.44 [4.97]	1979.04 [1978.01,1982.06]	0.0418	0.00582
MNU	32.30 [0.52]	20.13 [0.21]	22.40 [1.08]	15.61 [1.53]	-30.31 [7.61]	1987.10 [1985.02,1994.06]	0.0306	0.00929
MPCON	90.75 [1.04]	85.01 [0.42]	55.81 [7.71]	92.60 [3.93]	65.93 [23.98]	1967.12 [1964.05,1968.12]	1.98E-005	0.622
MPCONQ	89.70 [1.03]	84.67 [0.42]	58.91 [7.62]	91.37 [3.89]	55.10 [21.12]	1967.12 [1963.07,1969.04]	0.000179	0.668
Consumption								
GMCQ	8.20 [0.29]	6.31 [0.12]	7.22 [0.35]	4.65 [0.47]	-35.66 [7.19]	1987.02 [1985.12,1992.03]	2.98E-005	0.0255
GMCDQ	44.46 [0.67]	29.69 [0.27]	32.72 [1.69]	21.37 [2.80]	-34.70 [9.18]	1990.02 [1988.11,1996.10]	0.0196	0.00143
GMCNQ	9.01 [0.32]	8.34 [0.13]	9.69 [0.42]	5.84 [0.57]	-39.71 [6.41]	1987.03 [1985.10,1990.03]	3.46E-007	0.383
GMCSQ	4.25 [0.23]	3.87 [0.09]	2.70 [0.31]	4.35 [0.20]	61.04 [19.79]	1971.11 [1967.06,1972.11]	0.000189	0.404
GMCANQ	132.16 [1.14]	79.90 [0.46]	87.56 [5.00]	58.88 [8.29]	-32.76 [10.22]	1990.02 [1987.11,1999.02]	0.0530	0.000484
Money and credit								
FM1	5.54 [0.27]	5.70 [0.11]	3.90 [0.33]	7.28 [0.31]	86.82 [17.82]	1979.03 [1976.11,1979.10]	5.35E-006	0.878
FM2	3.40 [0.23]	3.93 [0.09]	2.17 [0.33]	4.49 [0.19]	107.11 [32.56]	1969.03 [1967.02,1969.07]	1.50E-007	0.336
FM3	4.33 [0.22]	4.30 [0.09]	2.34 [0.32]	4.88 [0.18]	108.11 [29.37]	1968.10 [1967.04,1969.03]	1.01E-008	0.961
FML	4.63 [0.25]	5.34 [0.10]	4.93 [0.23]	6.59 [0.41]	33.51 [10.33]	1989.12 [1982.05,1993.02]	0.0367	0.102
FM2DQ	5.70 [0.23]	4.65 [0.09]	5.19 [0.24]	4.03 [0.25]	-22.28 [6.06]	1983.03 [1979.03,1992.07]	0.264	0.252
FMFBA	3.67 [0.20]	3.27 [0.08]	4.10 [0.34]	3.13 [0.14]	-23.66 [7.26]	1965.12 [1961.02,1974.10]	0.625	0.507
FMBASE	4.73 [0.24]	4.38 [0.10]	3.83 [0.27]	4.89 [0.26]	27.91 [11.22]	1979.09 [1967.03,1985.11]	0.132	0.501
FMRRR	9.14 [0.38]	12.10 [0.15]	10.16 [0.65]	14.05 [0.65]	38.31 [10.84]	1980.10 [1974.07,1983.04]	0.00170	0.00148
FMRNBA	25.46 [0.56]	17.50 [0.23]	12.28 [1.56]	21.28 [1.33]	73.37 [24.57]	1977.07 [1971.08,1979.02]	0.00116	0.0852
FMRNBC	21.14 [0.47]	15.13 [0.20]	10.06 [1.58]	16.64 [0.86]	65.37 [27.43]	1968.01 [1963.01,1968.12]	8.80E-007	0.0753
FCLS	4.54 [0.29]	4.46 [0.12]	4.23 [0.24]	5.57 [0.52]	31.79 [14.41]	1996.01 [1986.09,1999.12]	0.188	0.918
FCSGV	14.52 [0.49]	12.40 [0.20]	18.25 [1.80]	11.60 [0.67]	-36.42 [7.27]	1977.11 [1976.09,1982.02]	0.488	0.401
FCLRE	4.63 [0.30]	5.88 [0.12]	5.19 [0.36]	6.38 [0.31]	22.95 [10.41]	1986.06 [1977.02,1992.09]	0.965	0.0989
FCLIN	7.84 [0.37]	8.07 [0.15]	9.98 [0.57]	6.89 [0.45]	-30.99 [5.99]	1985.07 [1982.12,1988.04]	0.422	0.910
FCLNBF	21.45 [0.62]	20.30 [0.29]	16.28 [1.62]	24.85 [1.72]	52.58 [18.49]	1985.09 [1981.06,1987.09]	0.00717	0.791
FCLNQ	12.85 [0.37]	10.78 [0.15]	8.08 [0.93]	11.59 [0.51]	43.38 [17.73]	1968.10 [1962.08,1971.03]	0.387	0.0669
FCLBMC	32135.85 [26.67]	36361.60 [10.76]	10873.12 [2964.93]	60174.78 [2865.83]	453.43 [153.20]	1979.09 [1978.07,1979.10]	5.38E-011	0.621
CCI30M	85.09 [1.22]	96.55 [0.52]	48.36 [7.69]	128.53 [6.26]	165.78 [44.19]	1973.10 [1971.12,1973.11]	6.96E-019	0.421
CCINT	2919319.98 [318.32]	2807552.71 [121.48]	681203.76 [419778.84]	3418878.04 [225081.33]	401.89 [311.04]	1979.11 [1979.10,1979.11]	3.95E-014	0.864
CCINV	1216809.13 [217.58]	1416209.07 [83.03]	361518.40 [173907.53]	1800367.92 [104956.96]	398.00 [241.32]	1981.02 [1980.08,1981.03]	1.36E-020	0.525
Stock prices								
FSNCOM	63.77 [0.71]	34.97 [0.29]	37.62 [1.98]	29.20 [2.92]	-22.38 [8.78]	1988.06 [1981.08,1999.12]	0.369	1.68E-005
FSNIN	71.44 [0.79]	36.61 [0.33]	41.31 [2.46]	29.10 [3.11]	-29.56 [8.61]	1988.06 [1985.05,1996.11]	0.0257	4.99E-008
FSNTR	90.76 [0.89]	53.76 [0.37]	58.89 [3.00]	43.55 [4.24]	-26.05 [8.12]	1989.11 [1985.02,1997.05]	0.0336	7.51E-011
FSNUT	55.48 [0.69]	34.31 [0.28]	41.29 [3.00]	32.11 [1.68]	-22.23 [6.97]	1976.01 [1971.12,1987.09]	0.107	0.00152
FSNFI	89.89 [0.87]	48.85 [0.36]	57.99 [4.78]	45.92 [2.71]	-20.81 [8.03]	1976.02 [1967.07,1988.03]	0.386	2.47E-005

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Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
FSPCOM	61.55 [0.70]	34.60 [0.28]	36.24 [1.92]	30.43 [3.06]	-16.03 [9.55]	1989.08 [1972.06,1999.12]	0.866	2.10E-005
FSPIN	62.63 [0.71]	35.18 [0.29]	37.15 [1.97]	30.15 [3.15]	-18.83 [9.50]	1989.08 [1977.10,1999.12]	0.550	1.50E-005
FSPCAP	71.54 [0.77]	41.54 [0.31]	43.95 [2.36]	36.21 [3.52]	-17.62 [9.14]	1988.08 [1974.01,1999.12]	0.489	4.09E-006
FSPTR	89.33 [0.98]	52.23 [0.38]	56.86 [3.20]	44.54 [4.13]	-21.67 [8.50]	1989.11 [1983.03,1999.12]	0.161	1.53E-011
FSPUT	57.74 [0.67]	34.94 [0.27]	28.38 [3.86]	36.10 [1.62]	27.21 [18.22]	1966.01 [1960.02,1976.09]	0.812	0.00406
FSPFI	98.83 [0.99]	52.77 [0.39]	50.23 [2.87]	64.65 [6.20]	28.70 [14.36]	1995.07 [1986.02,1999.12]	0.525	4.61E-005

Dividends and volume

FSDXP	65.37 [0.74]	36.83 [0.30]	35.60 [1.97]	42.67 [4.28]	19.86 [13.74]	1993.12 [1964.04,1999.12]	0.833	5.86E-005
FSPXE	67.78 [0.79]	43.89 [0.32]	39.91 [3.57]	45.82 [2.49]	14.82 [12.01]	1973.01 [1960.02,1999.12]	0.874	0.000583
FSNVV3	45.13 [1.11]	37.33 [0.41]	63.88 [4.36]	26.48 [2.79]	-58.54 [5.20]	1981.06 [1981.02,1983.03]	5.77E-009	0.518

Interest rates

FYFF	1127.21 [3.35]	377.69 [1.35]	460.49 [43.48]	178.55 [67.43]	-61.23 [15.09]	1989.03 [1988.12,1996.11]	0.00333	0.000528
FYCP	1013.76 [3.18]	394.49 [1.33]	158.18 [68.01]	473.26 [39.26]	199.18 [131.00]	1968.11 [1964.01,1969.02]	1.15E-005	0.00945
FYGM3	947.23 [2.97]	332.02 [1.20]	118.37 [71.64]	373.52 [31.57]	215.54 [192.81]	1966.06 [1961.05,1967.02]	0.000154	0.00798
FYGM6	899.17 [2.84]	345.14 [1.14]	129.00 [65.03]	387.11 [28.66]	200.08 [152.89]	1966.06 [1962.05,1967.02]	1.13E-005	0.0107
FYGT1	940.45 [2.86]	384.96 [1.15]	126.41 [65.81]	435.17 [29.00]	244.25 [180.67]	1966.06 [1963.07,1966.12]	1.11E-008	0.0119
FYGT5	642.89 [2.37]	328.99 [0.96]	150.71 [36.40]	386.88 [20.74]	156.71 [63.51]	1969.04 [1966.10,1969.08]	1.03E-014	0.0249
FYGT10	519.87 [2.19]	278.91 [0.88]	181.31 [22.07]	369.21 [21.22]	103.64 [27.41]	1979.08 [1976.01,1980.04]	3.34E-017	0.0462
FYAAAC	407.33 [1.99]	203.00 [0.80]	111.25 [17.85]	287.90 [17.17]	158.79 [44.29]	1979.08 [1976.11,1980.01]	1.37E-015	0.0603
FYBAAC	350.37 [1.86]	196.42 [0.75]	110.49 [15.63]	275.93 [15.03]	149.74 [37.85]	1979.08 [1977.03,1979.12]	4.58E-021	0.0416
FWAFIT	536.03 [2.72]	329.47 [1.28]	485.24 [36.20]	241.16 [27.26]	-50.30 [6.73]	1983.01 [1982.06,1985.04]	0.00177	0.00384
FYFHA	520.34 [2.36]	257.67 [0.95]	124.32 [25.17]	381.04 [24.21]	206.50 [65.03]	1979.08 [1976.11,1979.11]	4.42E-023	0.0785

Exchange rates

EXRUS	27.02 [0.72]	20.07 [0.25]	12.84 [2.19]	21.90 [1.10]	70.62 [30.33]	1979.09 [1976.11,1980.09]	0.0240	0.00396
EXRGER	35.09 [0.87]	31.46 [0.31]	22.55 [3.07]	34.20 [1.70]	51.65 [21.98]	1980.09 [1977.03,1982.12]	0.0182	0.365
EXRSW	42.01 [0.95]	35.02 [0.33]	28.31 [3.64]	37.00 [1.98]	30.70 [18.18]	1980.10 [1975.02,1989.01]	0.855	0.241
EXRJAN	42.25 [0.93]	32.33 [0.32]	30.05 [1.91]	40.53 [3.62]	34.88 [14.78]	1995.02 [1986.11,1998.12]	0.436	0.0130
EXRUK	30.36 [0.89]	29.65 [0.31]	34.80 [1.77]	17.63 [2.71]	-49.33 [8.21]	1993.04 [1992.11,1995.04]	2.08E-007	0.870
EXRCAN	12.42 [0.54]	12.83 [0.19]	11.57 [0.85]	13.85 [0.76]	19.63 [11.00]	1986.12 [1975.07,1999.09]	0.610	0.851

Producer prices

PWFSA	7.95 [0.28]	4.89 [0.11]	5.47 [0.32]	3.89 [0.42]	-28.90 [8.72]	1986.07 [1983.08,1997.08]	0.199	0.102
PWFCSA	8.68 [0.30]	5.87 [0.12]	6.55 [0.38]	4.71 [0.49]	-28.01 [8.60]	1986.07 [1982.11,1997.08]	0.108	0.132
PWIMSA	10.57 [0.31]	5.29 [0.13]	3.70 [0.58]	6.02 [0.39]	62.76 [27.44]	1972.08 [1963.11,1973.10]	0.0533	0.122
PWCMSA	33.30 [0.61]	20.78 [0.25]	18.21 [1.33]	32.92 [2.88]	80.77 [20.59]	1993.12 [1990.10,1995.09]	0.00470	0.188
PWFXSA	9.26 [0.32]	5.30 [0.13]	2.94 [0.81]	5.71 [0.34]	93.95 [54.56]	1973.01 [1969.02,1974.01]	0.00300	0.0922
PW160A	24.41 [0.69]	19.48 [0.24]	26.06 [1.83]	17.36 [1.04]	-33.37 [6.13]	1981.02 [1979.09,1984.12]	4.07E-008	0.249
PW150A	24.94 [0.72]	19.17 [0.25]	28.03 [1.94]	16.20 [1.12]	-42.19 [5.65]	1981.04 [1980.06,1983.12]	0.00136	0.0669
PW561	69.26 [1.07]	53.37 [0.43]	25.24 [4.34]	98.12 [5.48]	288.69 [70.29]	1986.01 [1984.02,1986.02]	7.37E-011	0.623
PWCM	8.40 [0.30]	6.33 [0.12]	7.34 [0.42]	5.27 [0.43]	-28.23 [7.11]	1981.04 [1979.02,1991.08]	0.0638	0.344

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Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
PWXFA	10.79 [0.34]	5.60 [0.14]	3.36 [0.95]	5.98 [0.39]	78.22 [51.54]	1972.11 [1968.02,1974.04]	0.00231	0.109
PSM99Q	25.54 [0.48]	17.55 [0.19]	12.94 [1.36]	19.49 [0.88]	50.57 [17.25]	1971.12 [1966.08,1973.07]	0.000134	0.0221
PSCCOM	26.56 [0.56]	22.22 [0.23]	15.97 [1.83]	25.10 [1.24]	57.17 [19.62]	1972.08 [1966.12,1973.08]	0.00261	0.416
PSCFOO	38.43 [0.70]	31.89 [0.28]	21.72 [2.77]	36.74 [1.91]	69.11 [23.26]	1972.11 [1967.11,1973.07]	0.00212	0.481
PSCMAT	30.86 [0.55]	23.76 [0.22]	18.92 [1.82]	25.80 [1.18]	36.41 [14.52]	1971.12 [1963.12,1975.05]	0.0245	0.163
PZFR	26.95 [0.82]	23.58 [0.28]	32.26 [2.77]	21.43 [1.38]	-33.58 [7.12]	1980.10 [1979.03,1985.10]	0.0344	0.540
PCGOLD	83.02 [1.40]	48.48 [0.48]	80.76 [6.98]	37.78 [4.02]	-53.22 [6.42]	1983.03 [1982.10,1986.04]	0.0419	0.0156

Consumer prices

PUNEW	5.10 [0.21]	3.18 [0.08]	3.99 [0.19]	2.25 [0.20]	-43.61 [5.72]	1983.04 [1982.06,1986.03]	0.0115	0.0232
PU81	5.63 [0.31]	4.75 [0.13]	6.61 [0.47]	3.65 [0.36]	-44.74 [6.78]	1980.11 [1980.07,1986.05]	0.0370	0.453
PUH	6.72 [0.24]	3.61 [0.10]	4.55 [0.29]	2.98 [0.23]	-34.54 [6.58]	1982.12 [1982.06,1989.08]	0.414	0.00638
PU83	3.57 [0.24]	4.32 [0.10]	3.15 [0.23]	6.18 [0.29]	96.25 [17.21]	1986.01 [1983.11,1986.08]	3.71E-007	0.351
PU84	9.57 [0.31]	6.24 [0.13]	5.28 [0.48]	7.02 [0.44]	32.94 [14.67]	1978.08 [1961.10,1982.06]	0.218	0.0166
PU85	4.87 [0.20]	3.27 [0.08]	4.18 [0.18]	2.24 [0.19]	-46.45 [5.09]	1983.03 [1982.10,1985.07]	1.80E-006	0.0323
PUC	5.65 [0.24]	3.88 [0.10]	3.02 [0.34]	4.30 [0.23]	42.44 [17.68]	1972.12 [1963.05,1975.06]	0.139	0.0627
PUCD	5.97 [0.23]	3.66 [0.09]	4.12 [0.22]	2.91 [0.28]	-29.52 [7.85]	1986.04 [1983.12,1995.02]	0.280	0.0581
PUS	5.47 [0.22]	3.28 [0.09]	4.35 [0.21]	2.09 [0.22]	-51.95 [5.62]	1982.12 [1982.09,1985.06]	0.000257	0.0329
PUXF	5.56 [0.21]	3.19 [0.09]	3.96 [0.20]	2.31 [0.21]	-41.75 [6.12]	1983.04 [1982.04,1986.11]	0.0323	0.00724
PUXHS	4.80 [0.22]	3.33 [0.09]	3.95 [0.21]	2.63 [0.22]	-33.53 [6.60]	1983.02 [1980.12,1988.09]	0.0487	0.0977
PUXM	5.08 [0.22]	3.27 [0.09]	4.04 [0.21]	2.38 [0.22]	-41.17 [6.20]	1983.04 [1982.06,1987.03]	0.0302	0.0297
GMDC	4.15 [0.18]	2.62 [0.07]	3.11 [0.15]	2.11 [0.15]	-32.05 [5.95]	1981.03 [1979.08,1986.09]	0.0690	0.0714
GMDCD	5.41 [0.22]	3.36 [0.09]	3.15 [0.18]	4.37 [0.39]	38.82 [14.75]	1993.11 [1989.11,1999.12]	0.389	0.0743
GMDCN	5.69 [0.24]	3.93 [0.10]	2.95 [0.33]	4.40 [0.23]	49.07 [18.47]	1972.12 [1965.05,1974.05]	0.0569	0.141
GMDCS	3.61 [0.17]	2.46 [0.07]	2.94 [0.13]	1.95 [0.14]	-33.81 [5.55]	1981.07 [1979.06,1985.02]	0.000207	0.0638

Miscellaneous

PMI	3446.33 [6.07]	2751.56 [2.45]	3208.31 [157.37]	2132.98 [183.14]	-33.52 [6.57]	1984.09 [1982.10,1989.12]	0.00299	0.230
PMP	4527.37 [7.47]	4003.34 [3.01]	4624.35 [239.47]	3170.62 [277.30]	-31.44 [6.97]	1984.08 [1982.09,1991.07]	0.00645	0.397
PMNO	4650.88 [7.73]	4307.38 [3.12]	4671.73 [258.28]	3809.02 [302.07]	-18.47 [7.88]	1984.10 [1976.06,1999.12]	0.355	0.647
PMDEL	5468.80 [7.66]	3471.37 [3.09]	4505.18 [244.22]	2057.31 [285.63]	-54.33 [6.81]	1984.10 [1984.06,1987.08]	5.41E-010	0.0634
PMNV	4081.10 [6.99]	3712.14 [2.82]	4230.79 [213.27]	3063.13 [238.57]	-27.60 [6.72]	1984.01 [1980.05,1991.05]	0.00476	0.487
PMEMP	3673.31 [6.38]	3099.69 [2.57]	3521.18 [160.31]	2234.86 [229.63]	-36.53 [7.13]	1988.01 [1986.11,1992.06]	0.000393	0.137
PMCP	5730.65 [8.05]	4575.29 [3.25]	5073.20 [274.20]	3829.93 [335.49]	-24.51 [7.77]	1985.07 [1979.12,1996.10]	0.0687	0.156
HHSNTN	4935.93 [7.52]	3752.29 [3.03]	2037.91 [262.38]	5082.42 [231.11]	149.39 [34.05]	1978.02 [1976.04,1978.05]	1.18E-013	0.224
F6EDM	90.04 [1.27]	102.44 [0.50]	140.98 [10.37]	92.20 [5.35]	-34.60 [6.13]	1972.04 [1970.12,1978.07]	0.00480	0.142
FTMC6	160.74 [1.36]	122.92 [0.56]	134.47 [6.47]	84.89 [11.74]	-36.87 [9.24]	1991.06 [1990.06,1995.09]	0.000534	0.0429
FTMM6	99.59 [1.19]	77.70 [0.47]	96.78 [5.27]	49.14 [6.45]	-49.22 [7.21]	1987.03 [1986.11,1990.05]	5.65E-010	0.186

Results for SupW tests for structural change in unconditional volatility during expansions for individual series, when assuming a constant unconditional mean. The columns headed σ_R and σ_0 contain estimates of the unconditional standard deviation during recessions and expansions under the null hypothesis, respectively. Columns headed σ_1 and σ_2 contain estimates of the unconditional standard deviation during expansions before and after the break, respectively. The column headed $\Delta\sigma$ contains the percent change in standard deviation. The estimated volatility break date is given in the column headed τ_v , with the 90% confidence interval given in brackets. The column headed p-value_v contains the asymptotic p-value of the corresponding SupW test. The column headed p-value_{nl} contains the asymptotic p-value of the Wald test for nonlinearity in unconditional volatility. Figures in brackets below parameter estimates are standard errors.

Table A.6: Tests for structural change in recession volatility

Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
Production								
IP	7.61 [0.14]	16.57 [0.34]	12.44 [1.33]	20.34 [1.27]	63.41 [20.22]	1974.10 [1970.10,1979.05]	0.238	2.73E-006
IPP	7.80 [0.13]	14.58 [0.32]	11.56 [1.25]	17.18 [1.16]	48.55 [18.93]	1974.09 [1967.08,1981.12]	0.138	4.91E-006
IPF	8.43 [0.14]	14.79 [0.34]	10.46 [1.83]	16.27 [1.07]	55.52 [29.07]	1970.07 [1962.05,1977.08]	0.00410	4.76E-006
IPC	10.05 [0.15]	14.10 [0.37]	15.56 [1.29]	9.46 [2.30]	-39.19 [15.65]	1982.03 [1977.05,1997.07]	4.69E-009	0.0142
IPCD	24.80 [0.26]	36.73 [0.64]	30.80 [4.89]	42.16 [4.68]	36.90 [26.51]	1974.10 [1960.02,1999.12]	4.97E-010	0.00131
IPCN	8.84 [0.13]	9.10 [0.32]	10.50 [1.12]	7.39 [1.25]	-29.64 [14.06]	1975.03 [1960.02,1999.12]	0.0307	0.801
IPE	12.37 [0.17]	22.16 [0.41]	16.58 [2.06]	26.42 [1.80]	59.31 [22.56]	1974.07 [1967.11,1979.04]	0.0144	9.06E-005
IPI	9.62 [0.15]	15.83 [0.37]	10.66 [1.70]	19.55 [1.44]	83.43 [32.22]	1974.06 [1969.08,1979.02]	3.13E-013	0.00673
IPM	10.07 [0.16]	21.42 [0.40]	16.92 [1.83]	25.53 [1.75]	50.91 [19.34]	1974.10 [1968.06,1982.01]	0.0180	9.74E-006
IPMD	14.31 [0.19]	31.96 [0.48]	35.13 [2.15]	21.86 [3.83]	-37.78 [11.56]	1982.03 [1980.04,1992.01]	0.00471	2.90E-009
IPMND	11.54 [0.17]	21.98 [0.43]	10.55 [2.08]	31.82 [1.93]	201.63 [62.22]	1974.09 [1972.09,1975.05]	0.0122	0.0170
IPMFG	8.22 [0.14]	18.72 [0.36]	14.04 [1.49]	23.01 [1.42]	63.84 [20.08]	1974.10 [1970.10,1979.02]	0.181	1.60E-006
IPD	10.95 [0.17]	24.36 [0.42]	19.66 [2.07]	28.66 [1.98]	45.80 [18.33]	1974.10 [1968.09,1985.03]	0.0328	1.05E-009
IPN	7.89 [0.14]	13.04 [0.34]	8.36 [1.32]	17.07 [1.23]	104.10 [35.40]	1974.09 [1970.09,1977.02]	0.000799	0.0235
IPMIN	13.06 [0.17]	15.04 [0.43]	10.12 [2.40]	18.36 [1.97]	81.53 [47.24]	1974.05 [1962.05,1982.08]	0.0555	0.383
IPUT	18.82 [0.21]	15.86 [0.52]	5.01 [4.79]	18.72 [2.46]	273.46 [360.39]	1970.04 [1960.02,1972.10]	5.97E-014	0.229
IPX	595.08 [1.37]	1311.48 [3.28]	1483.46 [95.89]	906.83 [147.09]	-38.87 [10.67]	1982.02 [1980.03,1990.07]	0.0557	2.23E-005
IPXMCA	672.73 [1.30]	1419.85 [3.22]	1601.64 [96.76]	885.20 [165.94]	-44.73 [10.89]	1982.02 [1980.05,1988.06]	0.0166	7.83E-006
IPXDCA	816.76 [1.66]	1785.43 [3.98]	2028.20 [140.69]	1214.21 [215.81]	-40.13 [11.42]	1982.02 [1979.07,1990.07]	0.00222	4.56E-007
IPXNCA	652.65 [1.37]	1087.65 [3.27]	1310.50 [94.37]	563.29 [144.76]	-57.02 [11.47]	1982.02 [1980.08,1986.08]	0.0301	0.0279
IPXMIN	1148.90 [1.86]	1545.13 [4.44]	947.71 [269.82]	1799.04 [175.90]	89.83 [57.14]	1974.05 [1968.02,1979.07]	0.0909	0.0752
IPXUT	1796.39 [2.24]	1533.91 [5.37]	1461.80 [222.83]	2831.78 [945.38]	93.72 [71.10]	1990.12 [1985.12,1997.10]	4.11E-005	0.190
GMPYQ	4.24 [0.10]	6.82 [0.25]	4.53 [1.19]	7.38 [0.58]	62.88 [44.57]	1970.03 [1960.02,1979.02]	5.25E-019	5.10E-005
GMYXPQ	4.23 [0.09]	7.52 [0.24]	4.81 [0.84]	8.60 [0.53]	78.84 [33.12]	1970.09 [1965.06,1973.03]	1.41E-008	3.55E-005
(Un)employment								
LHEL	2402.54 [2.31]	3341.48 [5.74]	2340.64 [397.82]	4152.97 [358.22]	77.43 [33.82]	1974.08 [1965.11,1978.03]	1.91E-008	0.0233
LHELX	47.37 [0.34]	84.30 [0.84]	106.65 [7.25]	49.05 [9.11]	-54.01 [9.10]	1980.05 [1979.04,1985.05]	0.0756	0.0124
LHEM	3.28 [0.09]	4.54 [0.22]	3.81 [0.56]	5.21 [0.54]	36.70 [24.48]	1974.10 [1962.06,1999.12]	0.362	0.00949
LHNAG	3.06 [0.08]	4.73 [0.20]	3.95 [0.48]	5.43 [0.46]	37.61 [20.48]	1974.10 [1964.07,1998.04]	9.52E-005	0.000340
LHUR	178.53 [0.67]	337.61 [1.66]	273.48 [33.45]	389.61 [30.12]	42.46 [20.61]	1974.08 [1962.03,1984.09]	0.0331	2.67E-006
LHU680	554.18 [1.09]	541.80 [2.70]	962.98 [153.13]	467.91 [64.14]	-51.41 [10.20]	1965.12 [1962.09,1974.07]	0.00195	0.882
LHU5	59.00 [0.35]	59.21 [0.87]	96.98 [14.67]	50.97 [6.85]	-47.45 [10.63]	1970.02 [1966.02,1979.08]	2.02E-005	0.981
LHU14	62.32 [0.35]	74.76 [0.88]	92.63 [7.85]	44.72 [10.17]	-51.72 [11.72]	1980.06 [1977.06,1987.11]	1.58E-007	0.194
LHU15	59.17 [0.36]	94.27 [0.88]	111.27 [8.13]	69.10 [9.89]	-37.90 [9.98]	1980.04 [1975.09,1989.05]	0.00544	0.000445
LHU26	92.78 [0.43]	106.15 [1.06]	130.03 [11.69]	70.78 [14.23]	-45.57 [11.99]	1980.04 [1974.02,1988.07]	3.37E-007	0.299
LHU27	82.09 [0.42]	102.51 [1.04]	118.24 [10.81]	72.44 [14.95]	-38.73 [13.83]	1981.08 [1976.07,1998.06]	0.00414	0.143
LHCH	255.84 [0.81]	177.77 [1.86]	126.76 [54.74]	196.50 [33.18]	55.02 [71.88]	1970.08 [1960.02,1995.02]	0.0973	2.56E-005

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Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
LPNAG	2.00 [0.07]	5.28 [0.17]	4.16 [0.34]	6.30 [0.32]	51.44 [14.55]	1974.10 [1971.11,1979.11]	0.538	5.80E-010
LP	2.32 [0.08]	6.07 [0.19]	4.91 [0.41]	7.13 [0.39]	45.34 [14.52]	1974.10 [1970.10,1981.06]	0.802	1.27E-008
LPGD	4.05 [0.10]	10.84 [0.26]	8.08 [0.77]	13.37 [0.74]	65.53 [18.34]	1974.10 [1972.03,1978.12]	0.459	2.78E-007
LPMI	9.38 [0.16]	15.26 [0.40]	16.86 [1.41]	3.44 [3.82]	-79.59 [22.73]	1982.11 [1980.07,1986.07]	3.37E-005	0.0557
LPCC	10.24 [0.17]	16.64 [0.43]	11.73 [2.61]	19.20 [1.89]	63.71 [39.83]	1974.01 [1969.05,1999.12]	0.105	0.00356
LPEM	3.73 [0.11]	10.65 [0.26]	8.06 [0.79]	13.01 [0.76]	61.42 [18.46]	1974.10 [1972.01,1980.03]	0.0366	9.60E-007
LPED	5.15 [0.13]	14.19 [0.31]	11.70 [1.13]	16.48 [1.08]	40.86 [16.47]	1974.10 [1970.09,1989.07]	0.00505	4.89E-008
LPEN	2.78 [0.09]	6.36 [0.22]	4.00 [0.57]	8.39 [0.53]	109.55 [32.83]	1974.09 [1971.08,1976.05]	0.131	0.00447
LPSP	1.62 [0.06]	3.11 [0.15]	2.49 [0.22]	4.04 [0.27]	62.07 [17.90]	1980.04 [1977.11,1985.05]	5.85E-007	2.27E-005
LPTU	4.62 [0.12]	5.72 [0.30]	7.95 [1.38]	4.90 [0.84]	-38.32 [15.03]	1970.08 [1960.02,1997.10]	0.0151	0.159
LPT	2.55 [0.08]	4.52 [0.20]	3.71 [0.46]	5.22 [0.43]	40.83 [20.94]	1974.09 [1968.07,1998.08]	9.16E-006	3.49E-005
LPFR	2.16 [0.06]	2.37 [0.16]	1.59 [0.32]	2.92 [0.27]	83.36 [39.94]	1974.06 [1965.09,1979.07]	7.37E-009	0.556
LPS	2.00 [0.06]	2.92 [0.16]	2.49 [0.24]	4.08 [0.40]	64.19 [22.45]	1982.01 [1979.05,1989.04]	1.25E-019	0.00656
LPGOV	2.52 [0.09]	4.47 [0.21]	3.24 [0.51]	5.73 [0.52]	77.24 [32.09]	1974.12 [1970.02,1983.12]	0.000233	0.00161
LW	118.39 [0.61]	191.23 [1.54]	223.96 [20.78]	107.35 [33.27]	-52.07 [15.50]	1982.03 [1978.05,1990.10]	0.144	0.0158
LPHRM	229.08 [0.83]	356.75 [2.07]	413.02 [39.43]	161.68 [73.42]	-60.85 [18.17]	1982.04 [1980.09,1991.11]	4.23E-009	0.0267
LPMOSA	127.16 [0.62]	181.08 [1.55]	206.87 [21.62]	73.93 [44.07]	-64.26 [21.63]	1982.06 [1979.05,1991.12]	2.49E-009	0.0606

Wages and salaries

LEH	3.25 [0.08]	3.83 [0.21]	4.42 [0.41]	2.55 [0.61]	-42.35 [14.82]	1982.01 [1977.03,1995.07]	0.000102	0.230
LEHCC	6.07 [0.12]	8.46 [0.31]	6.22 [1.17]	10.17 [1.02]	63.43 [34.72]	1974.07 [1965.11,1990.10]	0.000891	0.0257
LEHM	3.69 [0.09]	5.09 [0.23]	5.97 [0.52]	2.51 [0.89]	-58.00 [15.28]	1982.02 [1980.01,1989.12]	3.54E-013	0.0334
LEHTU	5.01 [0.11]	4.87 [0.29]	5.94 [0.79]	3.30 [0.97]	-44.39 [17.89]	1981.08 [1975.06,1999.12]	1.31E-012	0.846
LEHTT	3.25 [0.09]	3.93 [0.23]	4.91 [0.48]	2.26 [0.62]	-53.92 [13.50]	1981.10 [1978.05,1989.09]	0.00680	0.208
LEHFR	5.76 [0.12]	7.28 [0.31]	3.97 [1.30]	8.68 [0.84]	118.49 [74.35]	1974.05 [1967.02,1978.02]	4.77E-005	0.206
LEHS	3.89 [0.10]	5.44 [0.24]	6.71 [0.53]	2.71 [0.78]	-59.54 [12.13]	1982.01 [1980.05,1987.03]	2.72E-016	0.0109

Construction

HSFR	85.94 [0.44]	135.88 [1.09]	129.38 [10.06]	216.46 [35.44]	67.31 [30.33]	1990.10 [1988.10,1995.05]	5.36E-009	4.48E-006
HSNE	209.38 [0.67]	297.29 [1.67]	253.11 [31.29]	345.62 [32.72]	36.55 [21.26]	1975.01 [1960.03,1998.09]	0.00116	0.000495
HSMW	177.61 [0.63]	209.34 [1.57]	187.08 [20.01]	684.28 [92.44]	265.77 [63.03]	1990.12 [1990.07,1991.07]	6.89E-013	0.255
HSSOU	105.89 [0.49]	160.19 [1.22]	141.00 [13.61]	226.71 [25.34]	60.79 [23.74]	1982.04 [1976.01,1988.04]	8.22E-013	0.000597
HSWST	139.00 [0.53]	179.57 [1.31]	254.71 [32.99]	163.17 [15.41]	-35.94 [10.27]	1970.02 [1963.10,1979.05]	2.37E-008	0.0116
HSBR	64.45 [0.39]	99.00 [0.98]	58.56 [12.63]	123.07 [9.74]	110.18 [48.28]	1974.03 [1969.05,1978.02]	0.00114	0.0205
HSBNE	131.12 [0.56]	152.84 [1.48]	173.86 [18.93]	80.08 [35.21]	-53.94 [20.87]	1982.06 [1976.10,1995.04]	1.65E-006	0.359
HSBMW	110.40 [0.54]	157.29 [1.44]	176.06 [17.23]	67.22 [37.74]	-61.82 [21.76]	1982.09 [1976.04,1988.11]	0.00111	0.0887
HSBSOU	82.32 [0.43]	114.89 [1.14]	76.68 [18.79]	129.45 [11.60]	68.81 [44.05]	1974.03 [1962.03,1982.05]	3.52E-007	0.00612
HSBWST	96.04 [0.48]	141.23 [1.28]	24.43 [47.15]	149.88 [12.83]	513.54 [1185.42]	1970.03 [1966.07,1971.09]	4.22E-007	0.0238
HNS	79.83 [0.42]	124.36 [1.09]	84.77 [12.93]	157.55 [11.84]	85.85 [31.60]	1975.02 [1970.10,1978.08]	1.07E-006	0.0112
HNSNE	209.45 [0.88]	249.31 [2.16]	152.79 [46.35]	322.66 [40.41]	111.18 [69.31]	1980.06 [1974.02,1984.03]	0.00676	0.542
HNSMW	149.13 [0.73]	226.99 [1.80]	213.26 [21.96]	414.66 [81.19]	94.44 [43.02]	1990.12 [1988.10,1993.04]	4.55E-007	0.0176

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Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
HNSSOU	113.41 [0.60]	165.08 [1.48]	188.57 [17.63]	119.65 [24.51]	-36.55 [14.29]	1982.04 [1975.03,1993.10]	0.000129	0.0102
HNSWST	139.03 [0.68]	213.13 [1.67]	275.67 [23.52]	122.78 [28.27]	-55.46 [10.94]	1982.01 [1979.05,1985.04]	0.00256	0.0240
HNR	516.84 [1.17]	1083.44 [2.99]	709.89 [97.04]	1396.74 [88.87]	96.75 [29.67]	1975.02 [1971.12,1976.09]	0.0800	0.000991
HMOB	47.93 [0.34]	93.66 [0.85]	115.19 [7.04]	52.47 [9.74]	-54.45 [8.90]	1981.08 [1980.06,1985.07]	2.80E-005	0.000342
CONTC	16.99 [0.21]	27.91 [0.52]	31.90 [2.69]	22.43 [3.16]	-29.70 [11.53]	1980.07 [1973.07,1999.11]	0.0663	0.00232
CONPC	17.69 [0.21]	29.99 [0.54]	34.11 [2.92]	24.72 [3.30]	-27.54 [11.50]	1980.06 [1974.04,1999.12]	0.0463	0.00108
CONQC	34.55 [0.30]	46.69 [0.74]	44.42 [4.27]	87.55 [18.13]	97.09 [44.99]	1990.12 [1989.01,1993.10]	9.25E-014	0.0442
CONDO9	110.37 [0.50]	131.72 [1.23]	37.97 [28.78]	152.18 [13.44]	300.81 [305.90]	1970.02 [1965.11,1972.03]	1.56E-013	0.264

Trade

MSMTQ	11.55 [0.15]	15.59 [0.38]	12.39 [1.78]	18.03 [1.56]	45.54 [24.41]	1974.07 [1960.11,1987.05]	0.00285	0.0169
MSMQ	15.86 [0.18]	20.94 [0.45]	17.87 [2.42]	23.75 [2.31]	32.96 [22.16]	1974.10 [1960.02,1999.12]	3.72E-019	0.00379
MSDQ	23.14 [0.22]	28.34 [0.55]	23.21 [3.53]	33.03 [3.38]	42.30 [26.08]	1974.10 [1960.02,1999.04]	3.40E-054	0.0461
MSNQ	12.75 [0.16]	16.44 [0.40]	12.44 [2.41]	18.14 [1.57]	45.84 [30.94]	1970.10 [1960.02,1986.01]	1.32E-007	0.0223
WTQ	16.09 [0.19]	17.87 [0.46]	11.46 [2.87]	21.45 [2.14]	87.14 [50.43]	1974.02 [1967.05,1987.02]	5.45E-011	0.464
WTDQ	17.90 [0.20]	24.27 [0.48]	17.50 [3.33]	27.58 [2.33]	57.60 [32.86]	1973.12 [1961.05,1982.10]	4.22E-012	0.0460
WTNQ	21.62 [0.22]	24.59 [0.54]	15.47 [4.25]	28.75 [2.87]	85.84 [54.26]	1970.11 [1961.08,1982.03]	7.99E-009	0.418
RTQ	12.94 [0.18]	17.55 [0.45]	10.43 [2.96]	20.58 [1.93]	97.35 [58.92]	1970.10 [1963.01,1978.11]	0.00205	0.0317
RTDQ	27.51 [0.28]	40.86 [0.69]	31.21 [5.76]	48.67 [5.18]	55.95 [33.21]	1974.08 [1960.02,1990.02]	1.82E-017	0.00521
RTNQ	10.18 [0.15]	11.80 [0.36]	13.67 [1.47]	9.76 [1.54]	-28.62 [13.64]	1975.01 [1960.08,1999.12]	0.00141	0.105

Inventories

IVMTQ	4.16 [0.09]	6.22 [0.23]	6.08 [0.45]	15.26 [3.67]	150.85 [63.23]	1991.02 [1990.09,1992.01]	1.95E-047	0.000796
IVMFGQ	4.82 [0.10]	6.23 [0.25]	6.48 [0.56]	4.05 [1.63]	-37.44 [25.66]	1990.08 [1983.05,1999.12]	8.23E-012	0.0277
IVMFDQ	6.53 [0.12]	7.93 [0.29]	9.91 [1.33]	7.26 [0.78]	-26.80 [12.56]	1970.07 [1960.02,1999.12]	1.48E-009	0.0925
IVMFNQ	5.46 [0.10]	6.39 [0.26]	6.67 [0.59]	4.81 [1.41]	-27.84 [22.14]	1982.09 [1960.11,1999.12]	0.000533	0.0829
IVWRQ	7.98 [0.13]	12.09 [0.33]	18.94 [2.27]	10.89 [0.95]	-42.50 [8.51]	1965.12 [1962.10,1971.06]	0.0712	0.0160
IVRRQ	8.42 [0.14]	11.88 [0.34]	11.68 [0.93]	25.16 [7.54]	115.41 [66.80]	1991.02 [1990.05,1992.11]	5.38E-050	0.000513
IVSRQ	16.25 [0.19]	21.34 [0.46]	16.12 [2.59]	25.57 [2.33]	58.70 [29.29]	1974.08 [1961.12,1981.06]	7.64E-020	0.0126
IVSRMQ	24.81 [0.23]	33.42 [0.57]	27.63 [3.90]	38.71 [3.73]	40.12 [23.93]	1974.10 [1960.02,1990.12]	0.0723	0.00725
IVSRWQ	20.79 [0.20]	24.15 [0.50]	17.37 [3.02]	30.00 [2.80]	72.73 [34.08]	1974.09 [1965.10,1981.11]	0.000454	0.191
IVSRRQ	19.55 [0.22]	26.30 [0.55]	15.59 [3.74]	33.99 [3.17]	118.06 [56.16]	1974.06 [1967.06,1977.05]	1.84E-011	0.0826

Orders

MOCMQ	26.95 [0.24]	37.24 [0.60]	28.20 [4.37]	44.56 [3.94]	57.98 [28.19]	1974.08 [1966.09,1987.07]	0.00718	0.0285
MDOQ	36.32 [0.27]	51.47 [0.68]	40.35 [5.56]	60.49 [5.01]	49.92 [24.10]	1974.08 [1963.08,1984.06]	4.33E-024	0.00160
MSONDQ	84.66 [0.43]	94.33 [1.06]	81.43 [9.84]	177.43 [24.98]	117.90 [40.43]	1982.10 [1979.11,1985.08]	3.60E-006	0.466
MO	21.84 [0.21]	30.29 [0.52]	29.75 [2.24]	66.31 [18.20]	122.89 [63.44]	1991.02 [1990.02,1992.05]	8.23E-043	0.00174
MOWU	32.42 [0.25]	44.03 [0.63]	35.31 [4.81]	51.10 [4.33]	44.70 [23.23]	1974.08 [1960.02,1985.01]	2.70E-023	0.00130
MDO	36.39 [0.27]	50.13 [0.68]	41.48 [5.65]	56.73 [4.93]	36.78 [22.10]	1974.07 [1960.02,1992.01]	4.98E-039	0.000823
MDUWU	39.55 [0.28]	52.99 [0.69]	42.12 [5.86]	61.81 [5.27]	46.76 [23.94]	1974.08 [1961.08,1985.08]	1.03E-032	0.000663
MNO	13.42 [0.17]	19.21 [0.42]	15.19 [2.67]	20.92 [1.74]	37.72 [26.80]	1970.10 [1960.02,1985.01]	9.48E-007	0.0140

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Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
MNOU	22.22 [0.21]	24.76 [0.52]	35.92 [5.66]	22.81 [2.37]	-36.50 [11.99]	1965.12 [1960.02,1971.11]	6.83E-007	0.307
MU	11.33 [0.15]	17.56 [0.37]	21.78 [1.45]	12.36 [1.61]	-43.24 [8.29]	1975.03 [1972.04,1980.12]	1.52E-008	0.00287
MDU	11.76 [0.15]	17.79 [0.37]	22.30 [1.48]	12.22 [1.65]	-45.19 [8.23]	1975.03 [1972.06,1980.06]	1.15E-007	0.00582
MNU	20.13 [0.21]	32.30 [0.52]	35.69 [2.43]	16.81 [5.19]	-52.89 [14.90]	1982.07 [1980.03,1988.04]	1.35E-007	0.00929
MPCON	85.01 [0.42]	90.75 [1.04]	39.06 [22.75]	99.82 [9.53]	155.57 [150.87]	1965.12 [1960.02,1968.07]	9.10E-006	0.622
MPCONQ	84.67 [0.42]	89.70 [1.03]	38.47 [22.41]	98.69 [9.39]	156.50 [151.38]	1965.12 [1960.02,1968.05]	2.16E-005	0.668
Consumption								
GMCQ	6.31 [0.12]	8.20 [0.29]	6.88 [1.05]	9.27 [0.95]	34.63 [24.77]	1974.08 [1960.02,1999.12]	0.000388	0.0255
GMCDQ	29.69 [0.27]	44.46 [0.67]	34.91 [5.48]	51.74 [4.79]	48.20 [27.01]	1974.07 [1960.02,1984.03]	9.03E-013	0.00143
GMCNQ	8.34 [0.13]	9.01 [0.32]	12.60 [2.12]	8.30 [0.94]	-34.08 [13.35]	1970.01 [1960.06,1988.06]	0.182	0.383
GMCSQ	3.87 [0.09]	4.25 [0.23]	3.12 [0.62]	5.23 [0.57]	67.85 [38.01]	1974.09 [1960.02,1980.01]	1.82E-015	0.404
GMCANQ	79.90 [0.46]	132.16 [1.14]	95.55 [16.14]	160.09 [14.10]	67.55 [31.93]	1974.07 [1964.07,1980.06]	3.34E-006	0.000484
Money and credit								
FM1	5.70 [0.11]	5.54 [0.27]	3.81 [0.79]	7.66 [0.88]	100.80 [47.69]	1975.03 [1965.01,1978.04]	0.175	0.878
FM2	3.93 [0.09]	3.40 [0.23]	3.69 [0.47]	2.38 [0.88]	-35.54 [25.26]	1982.04 [1960.02,1999.12]	1.43E-008	0.336
FM3	4.30 [0.09]	4.33 [0.22]	4.03 [0.42]	6.93 [1.23]	72.03 [35.44]	1990.08 [1981.05,1995.01]	0.00160	0.961
FML	5.34 [0.10]	4.63 [0.25]	4.53 [0.50]	7.95 [2.86]	75.59 [66.07]	1991.01 [1980.07,1995.09]	2.01E-011	0.102
FM2DQ	4.65 [0.09]	5.70 [0.23]	6.63 [0.55]	4.22 [0.69]	-36.36 [11.74]	1980.05 [1970.02,1990.01]	0.0109	0.252
FMFBA	3.27 [0.08]	3.67 [0.20]	7.06 [0.83]	3.07 [0.35]	-56.48 [7.14]	1965.12 [1964.01,1968.11]	6.19E-006	0.507
FMBASE	4.38 [0.10]	4.73 [0.24]	6.22 [1.15]	4.43 [0.51]	-28.75 [15.45]	1970.01 [1960.02,1989.04]	0.0233	0.501
FMRRA	12.10 [0.15]	9.14 [0.38]	8.22 [1.28]	12.97 [2.61]	57.73 [40.13]	1982.06 [1960.02,1995.05]	3.84E-011	0.00148
FMRNBA	17.50 [0.23]	25.46 [0.56]	31.15 [3.21]	15.89 [4.15]	-48.97 [14.33]	1980.06 [1968.01,1985.04]	0.000215	0.0852
FMRNBC	15.13 [0.20]	21.14 [0.47]	22.58 [1.93]	10.51 [5.25]	-53.45 [23.57]	1982.11 [1976.04,1989.04]	0.000173	0.0753
FCLS	4.46 [0.12]	4.54 [0.29]	6.19 [0.82]	3.29 [0.71]	-46.87 [13.46]	1980.06 [1974.02,1986.09]	0.212	0.918
FCSGV	12.40 [0.20]	14.52 [0.49]	19.91 [2.07]	8.04 [2.27]	-59.62 [12.16]	1981.11 [1979.06,1987.03]	7.36E-009	0.401
FCLRE	5.88 [0.12]	4.63 [0.30]	5.02 [0.64]	2.90 [1.36]	-42.13 [28.18]	1982.11 [1974.02,1997.03]	0.0631	0.0989
FCLIN	8.07 [0.15]	7.84 [0.37]	7.30 [0.92]	15.18 [3.40]	107.88 [53.46]	1990.12 [1988.03,1993.06]	0.0590	0.910
FCLNBF	20.30 [0.29]	21.45 [0.62]	30.58 [3.81]	14.51 [3.32]	-52.55 [12.37]	1980.06 [1976.06,1983.12]	0.0511	0.791
FCLNQ	10.78 [0.15]	12.85 [0.37]	8.16 [2.10]	14.71 [1.32]	80.20 [49.03]	1970.09 [1960.02,1975.04]	1.01E-016	0.0669
FCLBMC	36361.60 [10.76]	32135.85 [26.67]	26038.67 [6030.75]	94123.89 [19229.17]	261.48 [111.64]	1990.09 [1983.11,1991.03]	6.80E-079	0.621
CCI30M	96.55 [0.52]	85.09 [1.22]	47.58 [17.33]	119.38 [16.57]	150.88 [97.78]	1974.10 [1962.08,1976.09]	8.55E-005	0.421
CCINT	2807552.71 [121.48]	2919319.98 [318.32]	8415509.48 [3017961.70]	2729796.20 [560421.42]	-67.56 [13.40]	1980.02 [1978.04,1980.10]	7.79E-028	0.864
CCINV	1416209.07 [83.03]	1216809.13 [217.58]	880802.17 [307337.82]	2000825.39 [469466.28]	127.16 [95.52]	1982.10 [1976.02,1986.04]	0.000707	0.525
Stock prices								
FSNCOM	34.97 [0.29]	63.77 [0.71]	36.45 [9.19]	70.34 [4.51]	92.96 [50.19]	1970.03 [1965.03,1973.06]	2.71E-005	1.68E-005
FSNIN	36.61 [0.33]	71.44 [0.79]	56.40 [8.40]	78.39 [5.71]	39.00 [23.04]	1974.06 [1967.02,1985.07]	1.48E-005	4.99E-008
FSNTR	53.76 [0.37]	90.76 [0.89]	92.26 [6.06]	6.54 [45.33]	-92.91 [49.14]	1991.02 [1990.04,1992.08]	3.47E-059	7.51E-011
FSNUT	34.31 [0.28]	55.48 [0.69]	68.45 [4.79]	40.02 [5.23]	-41.54 [8.67]	1980.05 [1977.09,1986.03]	2.70E-014	0.00152
FSNFI	48.85 [0.36]	89.89 [0.87]	81.37 [6.35]	125.50 [12.98]	54.23 [19.98]	1982.08 [1978.09,1987.05]	6.43E-007	2.47E-005

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Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
FSPCOM	34.60 [0.28]	61.55 [0.70]	46.89 [6.19]	72.07 [5.24]	53.67 [23.16]	1974.06 [1966.01,1981.05]	1.79E-005	2.10E-005
FSPIN	35.18 [0.29]	62.63 [0.71]	47.06 [6.36]	73.81 [5.39]	56.84 [24.08]	1974.06 [1966.07,1980.11]	0.000159	1.50E-005
FSPCAP	41.54 [0.31]	71.54 [0.77]	53.03 [7.46]	84.84 [6.32]	59.98 [25.48]	1974.06 [1966.03,1979.12]	8.31E-019	4.09E-006
FSPTR	52.23 [0.38]	89.33 [0.98]	90.79 [6.58]	23.64 [44.12]	-73.96 [48.63]	1991.02 [1989.09,1993.09]	9.30E-038	1.53E-011
FSPUT	34.94 [0.27]	57.74 [0.67]	31.53 [8.70]	63.46 [4.06]	101.29 [57.03]	1970.02 [1965.09,1973.10]	3.65E-008	0.00406
FSPFI	52.77 [0.39]	98.83 [0.99]	84.53 [7.51]	144.33 [13.40]	70.75 [21.95]	1982.08 [1979.08,1985.01]	2.03E-006	4.61E-005

Dividends and volume

FSDXP	36.83 [0.30]	65.37 [0.74]	44.76 [7.86]	74.79 [5.31]	67.10 [31.67]	1970.11 [1963.05,1975.11]	0.000210	5.86E-005
FSPXE	43.89 [0.32]	67.78 [0.79]	53.93 [7.80]	77.72 [6.61]	44.10 [24.18]	1974.06 [1960.02,1986.03]	0.00815	0.000583
FSNVV3	37.33 [0.41]	45.13 [1.11]	76.94 [10.26]	20.39 [9.04]	-73.50 [12.28]	1982.01 [1981.06,1988.08]	2.04E-006	0.518

Interest rates

FYFF	377.69 [1.35]	1127.21 [3.35]	548.44 [146.49]	1471.72 [113.02]	168.35 [74.58]	1974.03 [1969.09,1974.10]	0.00144	0.000528
FYCP	394.49 [1.33]	1013.76 [3.18]	336.54 [135.81]	1367.77 [98.19]	306.42 [166.59]	1974.01 [1971.03,1974.04]	0.00261	0.00945
FYGM3	332.02 [1.20]	947.23 [2.97]	543.33 [93.48]	1445.39 [103.81]	166.03 [49.60]	1975.03 [1972.05,1975.09]	0.00428	0.00798
FYGM6	345.14 [1.14]	899.17 [2.84]	526.06 [84.97]	1359.33 [94.36]	158.40 [45.43]	1975.03 [1972.07,1975.11]	0.00215	0.0107
FYGT1	384.96 [1.15]	940.45 [2.86]	546.66 [86.14]	1426.12 [95.67]	160.88 [44.68]	1975.03 [1972.09,1975.09]	0.0203	0.0119
FYGT5	328.99 [0.96]	642.89 [2.37]	372.49 [59.30]	976.38 [65.85]	162.12 [45.32]	1975.03 [1972.09,1975.10]	0.0458	0.0249
FYGT10	278.91 [0.88]	519.87 [2.19]	261.22 [49.98]	838.87 [55.51]	221.14 [65.02]	1975.03 [1973.03,1975.09]	0.0102	0.0462
FYAAAC	203.00 [0.80]	407.33 [1.99]	166.63 [40.19]	704.20 [44.64]	322.62 [105.40]	1975.03 [1973.08,1975.07]	0.0104	0.0603
FYBAAC	196.42 [0.75]	350.37 [1.86]	187.24 [36.63]	551.55 [40.68]	194.57 [61.58]	1975.03 [1972.08,1975.10]	0.000738	0.0416
FWAFIT	329.47 [1.28]	536.03 [2.72]	750.13 [79.41]	413.69 [60.03]	-44.85 [9.91]	1980.03 [1978.08,1986.07]	1.46E-005	0.00384
FYFHA	257.67 [0.95]	520.34 [2.36]	222.02 [57.94]	888.26 [64.35]	300.08 [108.36]	1975.03 [1973.02,1975.07]	0.00952	0.0785

Exchange rates

EXRUS	20.07 [0.25]	27.02 [0.72]	25.51 [2.91]	73.98 [16.21]	190.03 [71.67]	1991.02 [1990.06,1991.12]	1.14E-129	0.00396
EXRGER	31.46 [0.31]	35.09 [0.87]	32.01 [4.23]	130.31 [23.54]	307.04 [91.10]	1991.02 [1990.09,1991.07]	1.33E-165	0.365
EXRSW	35.02 [0.33]	42.01 [0.95]	38.76 [5.03]	142.67 [27.98]	268.08 [86.55]	1991.02 [1990.09,1991.09]	2.63E-058	0.241
EXRJAN	32.33 [0.32]	42.25 [0.93]	40.96 [4.99]	82.31 [27.77]	100.95 [72.09]	1991.02 [1988.01,1993.09]	6.37E-031	0.0130
EXRUK	29.65 [0.31]	30.36 [0.89]	27.74 [4.47]	111.52 [24.91]	302.05 [110.77]	1991.02 [1990.06,1991.09]	2.82E-314	0.870
EXRCAN	12.83 [0.19]	12.42 [0.54]	14.54 [1.81]	3.24 [3.77]	-77.69 [26.08]	1990.09 [1986.11,1994.12]	2.98E-016	0.851

Producer prices

PWFSA	4.89 [0.11]	7.95 [0.28]	4.66 [1.13]	9.45 [0.76]	102.72 [51.65]	1970.11 [1963.09,1972.09]	0.199	0.102
PWFCSA	5.87 [0.12]	8.68 [0.30]	5.23 [1.33]	10.26 [0.90]	96.19 [52.72]	1970.11 [1962.01,1973.06]	0.00883	0.132
PWIMSA	5.29 [0.13]	10.57 [0.31]	4.29 [1.41]	13.43 [0.95]	213.47 [105.29]	1970.11 [1967.07,1971.03]	0.0803	0.122
PWCMSA	20.78 [0.25]	33.30 [0.61]	25.36 [3.08]	91.88 [8.36]	262.36 [55.01]	1982.11 [1982.03,1983.07]	3.22E-011	0.188
PWFXSA	5.30 [0.13]	9.26 [0.32]	2.83 [1.69]	10.79 [0.83]	281.67 [230.20]	1972.10 [1970.01,1973.04]	0.0275	0.0922
PW160A	19.48 [0.24]	24.41 [0.69]	37.51 [4.08]	15.44 [3.38]	-58.82 [10.05]	1981.12 [1980.02,1986.08]	6.32E-007	0.249
PW150A	19.17 [0.25]	24.94 [0.72]	35.17 [4.36]	16.98 [3.84]	-51.73 [12.45]	1982.01 [1979.09,1992.02]	4.67E-008	0.0669
PW561	53.37 [0.43]	69.26 [1.07]	32.38 [8.68]	341.28 [23.58]	953.95 [291.86]	1982.11 [1982.04,1982.12]	3.26E-046	0.623
PWCM	6.33 [0.12]	8.40 [0.30]	10.42 [0.90]	4.25 [1.29]	-59.17 [12.83]	1981.09 [1980.03,1988.10]	0.243	0.344

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Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
PWXFA	5.60 [0.14]	10.79 [0.34]	3.17 [1.92]	12.62 [0.94]	297.88 [243.26]	1972.10 [1970.03,1973.02]	0.000642	0.109
PSM99Q	17.55 [0.19]	25.54 [0.48]	14.43 [3.28]	30.61 [2.22]	112.11 [50.60]	1970.11 [1965.08,1972.06]	0.000590	0.0221
PSCCOM	22.22 [0.23]	26.56 [0.56]	10.69 [4.55]	33.81 [3.07]	216.36 [137.74]	1970.11 [1965.09,1971.10]	0.000921	0.416
PSCFOO	31.89 [0.28]	38.43 [0.70]	13.61 [7.15]	48.99 [4.67]	260.00 [192.31]	1970.10 [1965.06,1971.07]	0.0196	0.481
PSCMAT	23.76 [0.22]	30.86 [0.55]	15.07 [4.34]	38.07 [2.93]	152.59 [75.33]	1970.11 [1966.07,1972.09]	0.000474	0.163
PZFR	23.58 [0.28]	26.95 [0.82]	48.21 [7.49]	20.48 [4.13]	-57.53 [10.81]	1981.08 [1979.07,1987.08]	0.000316	0.540
PCGOLD	48.48 [0.48]	83.02 [1.40]	99.57 [12.05]	28.65 [21.83]	-71.22 [22.20]	1990.08 [1989.06,1996.11]	1.11E-006	0.0156

Consumer prices

PUNEW	3.18 [0.08]	5.10 [0.21]	3.15 [0.63]	5.98 [0.42]	89.96 [40.03]	1970.11 [1964.07,1972.05]	0.0879	0.0232
PU81	4.75 [0.13]	5.63 [0.31]	7.92 [1.09]	3.96 [0.93]	-50.04 [13.54]	1974.12 [1972.12,1999.02]	0.0869	0.453
PUH	3.61 [0.10]	6.72 [0.24]	8.04 [0.55]	4.44 [0.72]	-44.78 [9.65]	1981.10 [1980.07,1988.07]	0.0387	0.00638
PU83	4.32 [0.10]	3.57 [0.24]	2.13 [0.88]	4.19 [0.57]	96.33 [85.12]	1970.10 [1960.02,1977.04]	0.000178	0.351
PU84	6.24 [0.13]	9.57 [0.31]	8.46 [0.85]	17.79 [2.30]	110.29 [34.45]	1982.11 [1980.03,1984.12]	3.97E-024	0.0166
PU85	3.27 [0.08]	4.87 [0.20]	2.68 [0.56]	6.10 [0.42]	127.60 [49.71]	1974.02 [1972.02,1978.08]	0.000587	0.0323
PUC	3.88 [0.10]	5.65 [0.24]	2.87 [0.85]	6.92 [0.57]	141.09 [73.75]	1970.11 [1965.04,1972.06]	0.000136	0.0627
PUCD	3.66 [0.09]	5.97 [0.23]	6.82 [0.48]	2.44 [0.98]	-64.15 [14.55]	1982.06 [1981.04,1987.01]	0.000739	0.0581
PUS	3.28 [0.09]	5.47 [0.22]	3.25 [0.63]	6.87 [0.50]	111.75 [44.01]	1974.04 [1969.06,1976.03]	0.00436	0.0329
PUXF	3.19 [0.09]	5.56 [0.21]	3.44 [0.64]	6.59 [0.45]	91.55 [37.83]	1973.12 [1968.03,1975.09]	0.0974	0.00724
PUXHS	3.33 [0.09]	4.80 [0.22]	2.73 [0.68]	5.75 [0.46]	110.81 [54.85]	1970.11 [1964.09,1973.01]	0.113	0.0977
PUXM	3.27 [0.09]	5.08 [0.22]	3.02 [0.66]	6.09 [0.46]	101.72 [46.61]	1973.12 [1968.04,1977.03]	0.0848	0.0297
GMDC	2.62 [0.07]	4.15 [0.18]	2.11 [0.47]	5.09 [0.32]	140.64 [56.12]	1970.11 [1967.08,1971.12]	0.129	0.0714
GMDCD	3.36 [0.09]	5.41 [0.22]	6.62 [0.51]	3.39 [0.66]	-48.83 [10.76]	1980.06 [1977.06,1987.03]	0.370	0.0743
GMDCN	3.93 [0.10]	5.69 [0.24]	2.69 [0.83]	7.06 [0.56]	163.00 [84.15]	1970.11 [1966.01,1971.10]	0.0294	0.141
GMDCS	2.46 [0.07]	3.61 [0.17]	1.73 [0.42]	4.46 [0.28]	158.76 [65.31]	1970.11 [1967.12,1972.01]	0.00281	0.0638

Miscellaneous

PMI	2751.56 [2.45]	3446.33 [6.07]	4266.46 [354.05]	1519.02 [542.76]	-64.40 [13.06]	1981.11 [1979.03,1986.05]	0.000359	0.230
PMP	4003.34 [3.01]	4527.37 [7.47]	5348.39 [541.01]	2597.97 [829.35]	-51.43 [16.27]	1981.11 [1975.03,1991.10]	0.000245	0.397
PMNO	4307.38 [3.12]	4650.88 [7.73]	5612.43 [572.02]	2221.68 [909.19]	-60.42 [16.69]	1981.12 [1978.01,1990.05]	0.00228	0.647
PMDEL	3471.37 [3.09]	5468.80 [7.66]	6899.68 [567.71]	2334.51 [840.23]	-66.17 [12.49]	1981.10 [1980.12,1987.05]	0.000135	0.0634
PMNV	3712.14 [2.82]	4081.10 [6.99]	4831.76 [467.84]	2184.67 [743.61]	-54.79 [16.00]	1981.12 [1977.08,1991.02]	0.000310	0.487
PMEMP	3099.69 [2.57]	3673.31 [6.38]	4118.78 [404.84]	2762.12 [579.00]	-32.94 [15.53]	1981.09 [1969.08,1999.12]	0.0320	0.137
PMCP	4575.29 [3.25]	5730.65 [8.05]	5082.37 [553.57]	11287.36 [1620.69]	122.09 [40.03]	1990.08 [1989.05,1993.04]	5.12E-006	0.156
HHSNTN	3752.29 [3.03]	4935.93 [7.52]	4497.97 [436.62]	33841.37 [3547.16]	652.37 [107.48]	1991.02 [1990.11,1991.03]	0.000	0.224
F6EDM	102.44 [0.50]	90.04 [1.27]	88.01 [12.31]	203.69 [92.14]	131.45 [109.59]	1991.02 [1989.08,1994.11]	4.27E-056	0.142
FTMC6	122.92 [0.56]	160.74 [1.36]	109.15 [21.39]	198.27 [18.24]	81.65 [39.33]	1974.12 [1967.05,1978.08]	2.78E-007	0.0429
FTMM6	77.70 [0.47]	99.59 [1.19]	76.02 [13.92]	131.99 [16.32]	73.64 [38.37]	1980.07 [1973.06,1993.05]	0.00167	0.186

Results for SupW tests for structural change in unconditional volatility during recessions for individual series, when assuming a constant unconditional mean. The columns headed σ_E and σ_0 contain estimates of the unconditional standard deviation during expansions and recessions under the null hypothesis, respectively. Columns headed σ_1 and σ_2 contain estimates of the unconditional standard deviation during recessions before and after the break, respectively. The column headed $\Delta\sigma$ contains the percent change in standard deviation. The estimated volatility break date is given in the column headed τ_v , with the 90% confidence interval given in brackets. The column headed p-value_v contains the asymptotic p -value of the corresponding SupW test. The column headed p-value_{nl} contains the asymptotic p -value of the Wald test for nonlinearity in unconditional volatility. Figures in brackets below parameter estimates are standard errors.

Table A.7: Tests for structural change in expansion volatility

Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
Production								
IP	16.59 [0.34]	7.56 [0.14]	8.93 [0.49]	5.80 [0.55]	-35.11 [7.16]	1984.03 [1982.12,1990.09]	2.36E-005	1.18E-006
IPP	14.35 [0.32]	7.77 [0.13]	8.33 [0.38]	5.73 [0.73]	-31.19 [9.35]	1992.07 [1990.08,1999.01]	0.00374	5.65E-006
IPF	14.72 [0.34]	8.36 [0.14]	8.82 [0.42]	6.69 [0.80]	-24.07 [9.71]	1992.07 [1988.05,1999.12]	0.137	1.56E-006
IPC	14.08 [0.37]	9.94 [0.15]	11.17 [0.61]	8.40 [0.68]	-24.84 [7.30]	1984.01 [1980.07,1995.09]	0.0119	0.00952
IPCD	36.27 [0.64]	24.85 [0.26]	26.34 [1.92]	23.33 [1.94]	-11.42 [9.79]	1980.12 [1960.02,1999.12]	1.00	0.00191
IPCN	9.25 [0.32]	8.63 [0.13]	9.16 [0.39]	7.19 [0.65]	-21.51 [7.90]	1990.02 [1985.02,1999.12]	0.00956	0.588
IPE	21.49 [0.41]	12.33 [0.17]	13.33 [0.62]	8.85 [1.16]	-33.62 [9.23]	1992.04 [1990.03,1997.11]	0.00126	0.000236
IPI	15.74 [0.37]	9.57 [0.15]	10.44 [0.50]	6.49 [0.94]	-37.84 [9.51]	1992.06 [1991.09,1997.06]	4.66E-005	0.00344
IPM	20.76 [0.40]	10.00 [0.16]	12.89 [0.67]	6.30 [0.75]	-51.17 [6.35]	1984.03 [1983.10,1987.01]	1.60E-011	2.65E-005
IPMD	30.60 [0.48]	14.14 [0.19]	18.30 [0.99]	8.88 [1.11]	-51.49 [6.61]	1984.02 [1983.09,1987.03]	3.58E-009	2.79E-008
IPMND	21.78 [0.42]	11.50 [0.17]	13.02 [0.78]	9.54 [0.89]	-26.78 [8.12]	1984.04 [1981.05,1997.04]	0.00119	0.0102
IPMFG	18.74 [0.36]	8.13 [0.14]	9.57 [0.56]	6.34 [0.62]	-33.75 [7.57]	1984.01 [1982.08,1991.11]	0.000197	6.33E-007
IPD	23.43 [0.42]	10.88 [0.17]	13.16 [0.77]	8.04 [0.86]	-38.89 [7.43]	1984.01 [1982.07,1989.09]	0.000523	1.51E-008
IPN	12.81 [0.34]	7.73 [0.14]	8.57 [0.43]	5.45 [0.70]	-36.44 [8.81]	1990.01 [1988.12,1995.09]	1.42E-006	0.0150
IPMIN	15.12 [0.43]	12.92 [0.17]	14.33 [0.76]	10.44 [1.01]	-27.10 [8.07]	1986.11 [1982.10,1996.08]	0.00871	0.314
IPUT	15.98 [0.52]	18.62 [0.21]	13.16 [1.19]	24.20 [1.21]	83.96 [19.05]	1980.12 [1977.09,1981.07]	6.53E-012	0.274
IPX	1270.04 [3.28]	596.44 [1.37]	761.15 [49.69]	464.49 [44.48]	-38.98 [7.07]	1984.03 [1983.04,1989.07]	0.000279	5.72E-005
IPXMCA	1375.47 [3.22]	677.64 [1.30]	820.04 [45.00]	499.44 [50.33]	-39.10 [6.99]	1984.01 [1983.01,1989.03]	7.24E-005	1.97E-005
IPXDCA	1682.08 [3.98]	833.46 [1.66]	1055.23 [73.99]	660.16 [65.40]	-37.44 [7.59]	1984.01 [1982.06,1990.02]	0.000127	5.17E-006
IPXNCA	1053.75 [3.25]	656.88 [1.36]	756.90 [40.18]	463.14 [55.93]	-38.81 [8.07]	1990.01 [1989.02,1994.05]	8.03E-008	0.0280
IPXMIN	1523.24 [4.44]	1145.55 [1.86]	1290.23 [75.47]	865.30 [105.04]	-32.93 [9.04]	1990.01 [1988.06,1997.03]	0.00507	0.0897
IPXUT	1527.53 [5.35]	1802.12 [2.24]	1349.61 [144.72]	2072.73 [111.92]	53.58 [18.44]	1980.12 [1975.06,1982.05]	0.00164	0.170
GMPYQ	6.73 [0.25]	4.14 [0.10]	3.43 [0.40]	4.41 [0.25]	28.44 [16.51]	1971.05 [1960.02,1985.07]	0.402	2.53E-005
GMYPXQ	7.43 [0.24]	4.14 [0.09]	3.33 [0.33]	4.50 [0.22]	35.05 [14.73]	1972.05 [1963.04,1976.11]	0.0244	1.63E-006
(Un)employment								
LHEL	3393.73 [5.68]	2416.96 [2.29]	1917.63 [128.22]	3289.11 [169.46]	71.52 [14.48]	1986.10 [1984.05,1988.03]	4.60E-008	0.0141
LHELX	82.40 [0.84]	47.68 [0.34]	58.72 [3.84]	41.69 [2.83]	-29.01 [6.69]	1973.11 [1970.09,1983.04]	0.148	0.0152
LHEM	4.58 [0.22]	3.24 [0.09]	3.83 [0.20]	2.45 [0.23]	-35.95 [7.00]	1984.08 [1983.03,1990.04]	3.03E-005	0.00878
LHNAG	4.66 [0.20]	3.02 [0.08]	3.28 [0.15]	2.12 [0.28]	-35.40 [9.04]	1992.03 [1991.05,1997.06]	8.29E-006	0.000427
LHUR	324.37 [1.62]	187.68 [0.65]	254.63 [22.23]	176.04 [9.27]	-30.87 [7.05]	1965.12 [1962.08,1970.12]	0.0152	2.30E-005
LHU680	538.07 [2.68]	558.69 [1.08]	743.97 [60.03]	525.24 [25.51]	-29.40 [6.65]	1966.02 [1963.06,1972.12]	0.463	0.804
LHU5	58.45 [0.87]	59.14 [0.35]	75.11 [5.04]	54.03 [2.85]	-28.06 [6.14]	1969.03 [1965.12,1976.03]	0.0870	0.935
LHU14	72.83 [0.88]	62.40 [0.35]	78.78 [4.91]	56.65 [2.91]	-28.08 [5.80]	1969.10 [1966.12,1976.06]	0.0225	0.263
LHU15	89.99 [0.88]	59.12 [0.36]	78.01 [4.89]	52.24 [2.95]	-33.03 [5.65]	1970.12 [1968.08,1975.07]	0.00889	0.00197
LHU26	103.51 [1.05]	93.10 [0.43]	118.80 [6.90]	83.50 [4.21]	-29.72 [5.41]	1971.02 [1968.07,1975.11]	0.00144	0.414
LHU27	100.76 [1.04]	81.81 [0.42]	107.76 [5.46]	65.16 [4.37]	-39.53 [5.09]	1976.07 [1975.07,1979.12]	1.46E-005	0.179
LHCH	177.46 [1.85]	258.00 [0.81]	238.09 [13.10]	363.94 [30.22]	52.85 [15.22]	1989.10 [1985.09,1991.11]	0.0465	7.29E-006

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Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nI}
LPNAG	5.30 [0.17]	1.96 [0.07]	2.41 [0.12]	1.35 [0.14]	-44.16 [6.47]	1984.11 [1984.05,1988.06]	5.10E-008	2.10E-010
LP	5.93 [0.19]	2.33 [0.08]	3.03 [0.15]	1.35 [0.17]	-55.45 [6.01]	1984.11 [1984.08,1987.01]	5.78E-013	3.62E-008
LPGD	10.95 [0.26]	3.94 [0.10]	4.97 [0.28]	2.58 [0.32]	-48.06 [7.14]	1984.07 [1984.03,1988.08]	2.29E-009	1.60E-007
LPMI	14.18 [0.39]	9.33 [0.16]	10.39 [0.63]	7.52 [0.83]	-27.63 [9.11]	1986.09 [1982.08,1999.05]	0.0337	0.0805
LPCC	16.06 [0.43]	10.06 [0.18]	13.41 [0.80]	5.65 [0.91]	-57.87 [7.24]	1984.06 [1984.03,1987.07]	2.98E-009	0.00556
LPED	10.50 [0.26]	3.66 [0.10]	4.83 [0.28]	2.12 [0.33]	-56.19 [7.26]	1984.07 [1984.03,1987.10]	5.31E-009	6.32E-007
LPEN	14.26 [0.31]	4.94 [0.13]	6.29 [0.41]	3.12 [0.47]	-50.41 [8.18]	1984.08 [1984.01,1989.05]	1.32E-005	4.63E-008
LPSP	6.30 [0.22]	2.69 [0.09]	3.52 [0.21]	1.63 [0.23]	-53.77 [7.17]	1984.04 [1983.11,1987.08]	7.49E-007	0.00249
LPTU	3.10 [0.14]	1.56 [0.06]	1.75 [0.08]	0.91 [0.14]	-47.98 [8.27]	1992.03 [1991.07,1994.08]	1.18E-009	5.78E-007
LPT	5.50 [0.30]	4.56 [0.12]	5.91 [0.41]	3.34 [0.39]	-43.48 [7.74]	1979.06 [1976.07,1984.04]	0.00820	0.236
LPFR	4.67 [0.20]	2.40 [0.08]	2.89 [0.16]	1.71 [0.19]	-40.97 [7.33]	1984.11 [1984.03,1990.02]	6.04E-005	4.98E-007
LPS	2.50 [0.15]	1.89 [0.06]	1.72 [0.08]	2.37 [0.14]	37.47 [10.45]	1990.07 [1985.12,1993.12]	0.00451	0.109
LPGOV	2.95 [0.16]	1.95 [0.06]	2.27 [0.10]	1.47 [0.13]	-35.10 [6.44]	1985.09 [1984.05,1990.03]	0.00163	0.00224
LW	4.12 [0.21]	2.15 [0.08]	2.50 [0.16]	1.05 [0.29]	-57.96 [11.83]	1991.09 [1991.07,1995.06]	1.87E-010	0.00146
LPHRM	187.47 [1.54]	116.99 [0.61]	139.82 [9.87]	93.64 [9.98]	-33.03 [8.56]	1984.05 [1980.03,1992.06]	0.00810	0.0212
LPMOSA	353.80 [2.06]	232.79 [0.83]	289.91 [20.04]	181.46 [19.00]	-37.41 [7.85]	1979.05 [1975.12,1986.02]	6.55E-005	0.0334
	179.44 [1.54]	129.63 [0.62]	149.55 [11.26]	111.72 [10.68]	-25.30 [9.09]	1979.05 [1974.02,1999.12]	0.302	0.0709

Wages and salaries

LEH	3.30 [0.21]	2.61 [0.08]	3.35 [0.15]	1.54 [0.19]	-54.11 [5.94]	1986.12 [1986.08,1988.10]	8.28E-016	0.233
LEHCC	7.69 [0.31]	5.70 [0.12]	9.46 [0.77]	5.02 [0.33]	-46.91 [5.55]	1966.02 [1965.02,1969.06]	0.00203	0.0579
LEHM	4.90 [0.23]	3.32 [0.09]	4.25 [0.24]	2.38 [0.24]	-43.94 [6.45]	1980.11 [1979.07,1984.08]	2.73E-007	0.00947
LEHTU	4.48 [0.27]	4.46 [0.11]	5.89 [0.30]	3.04 [0.30]	-48.43 [5.72]	1984.03 [1983.10,1986.09]	2.19E-008	0.983
LEHTT	3.33 [0.21]	2.90 [0.08]	3.37 [0.16]	2.18 [0.20]	-35.51 [6.77]	1987.06 [1986.03,1991.09]	1.83E-006	0.402
LEHFR	7.07 [0.31]	5.69 [0.12]	7.33 [0.31]	2.29 [0.45]	-68.77 [6.29]	1989.06 [1989.03,1990.07]	1.09E-019	0.250
LEHS	4.64 [0.24]	3.42 [0.10]	4.36 [0.20]	1.58 [0.28]	-63.88 [6.68]	1989.02 [1988.11,1990.07]	4.23E-020	0.0670

Construction

HSFR	135.81 [1.09]	86.15 [0.44]	97.32 [5.03]	70.10 [6.03]	-27.97 [7.22]	1985.03 [1981.08,1993.03]	0.00239	5.10E-006
HSNE	296.69 [1.67]	209.44 [0.67]	226.40 [12.14]	187.59 [13.79]	-17.15 [7.54]	1984.04 [1976.07,1999.12]	0.492	0.000516
HSMW	208.38 [1.57]	177.96 [0.63]	191.43 [9.37]	141.00 [15.53]	-26.34 [8.88]	1990.02 [1984.04,1998.11]	0.0175	0.275
HSSOU	159.74 [1.22]	105.74 [0.49]	113.03 [6.49]	96.34 [7.37]	-14.77 [8.15]	1984.04 [1967.02,1999.12]	0.483	0.000633
HSWST	179.74 [1.31]	138.61 [0.53]	134.80 [6.74]	147.76 [10.45]	9.61 [9.50]	1989.03 [1960.02,1999.12]	0.945	0.00956
HSBR	98.52 [0.98]	64.45 [0.39]	72.12 [3.60]	42.33 [6.12]	-41.30 [8.97]	1990.06 [1989.10,1995.01]	1.50E-006	0.0221
HSBNE	152.04 [1.48]	131.29 [0.56]	150.86 [8.33]	106.63 [9.35]	-29.32 [7.33]	1984.03 [1981.01,1992.04]	0.0395	0.382
HSBMW	156.95 [1.44]	110.81 [0.54]	125.09 [6.76]	70.52 [11.36]	-43.63 [9.58]	1990.05 [1989.07,1994.12]	4.48E-007	0.0918
HSBSOU	114.55 [1.14]	82.55 [0.43]	87.43 [4.32]	69.27 [7.13]	-20.77 [9.04]	1990.02 [1986.02,1999.12]	0.250	0.00661
HSBWST	141.42 [1.28]	96.09 [0.48]	102.00 [5.78]	85.08 [7.88]	-16.59 [9.06]	1987.05 [1977.09,1999.12]	0.474	0.0220
HNS	124.23 [1.09]	79.38 [0.42]	81.76 [3.84]	68.31 [8.29]	-16.45 [10.87]	1994.06 [1988.01,1999.12]	0.152	0.0103
HNSNE	248.93 [2.15]	210.28 [0.87]	165.63 [21.86]	231.13 [14.94]	39.54 [20.51]	1984.02 [1976.08,1990.11]	0.0260	0.552
HNSMW	225.79 [1.79]	150.12 [0.73]	105.86 [24.70]	156.14 [9.11]	47.50 [35.48]	1977.11 [1974.02,1982.03]	0.0120	0.0276

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Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nI}
HNSSOU	164.88 [1.48]	112.97 [0.60]	136.61 [9.76]	100.13 [7.19]	-26.70 [7.43]	1984.11 [1981.05,1992.01]	0.0842	0.0108
HNSWST	212.76 [1.68]	138.45 [0.68]	126.10 [9.43]	159.73 [12.38]	26.66 [13.64]	1991.10 [1977.12,1999.08]	0.303	0.0236
HNR	1085.07 [2.98]	518.08 [1.16]	544.31 [28.71]	395.63 [62.02]	-27.31 [12.02]	1994.06 [1991.01,1999.12]	0.168	0.000660
HMOB	93.15 [0.84]	47.30 [0.34]	58.09 [3.26]	36.61 [3.24]	-36.98 [6.61]	1980.09 [1979.03,1986.04]	5.29E-006	0.000252
CONTC	27.48 [0.52]	17.03 [0.21]	20.61 [1.12]	13.32 [1.13]	-35.36 [6.52]	1984.06 [1982.11,1989.02]	3.24E-005	0.00267
CONPC	29.38 [0.54]	17.69 [0.21]	24.17 [1.47]	14.48 [1.03]	-40.08 [5.62]	1977.04 [1976.03,1981.03]	0.00268	0.00159
CONQC	46.46 [0.74]	34.61 [0.29]	40.51 [2.34]	29.08 [2.26]	-28.22 [6.96]	1983.09 [1980.01,1990.11]	0.0795	0.0463
CONDO9	130.96 [1.23]	110.51 [0.49]	75.21 [11.66]	118.11 [5.41]	57.03 [25.39]	1966.12 [1961.12,1968.05]	2.87E-005	0.285

Trade

MSMTQ	15.21 [0.38]	11.51 [0.15]	12.34 [0.53]	8.43 [1.03]	-31.63 [8.85]	1992.09 [1991.04,1998.05]	0.000160	0.0274
MSMQ	20.88 [0.45]	15.89 [0.18]	17.28 [0.96]	14.59 [0.93]	-15.58 [7.16]	1979.09 [1967.02,1999.12]	0.0460	0.00352
MSDQ	27.59 [0.55]	23.04 [0.22]	24.81 [1.12]	17.12 [2.05]	-31.00 [8.81]	1992.01 [1990.03,1998.04]	0.00109	0.0790
MSNQ	16.38 [0.40]	12.68 [0.16]	13.55 [0.72]	11.66 [0.78]	-13.92 [7.35]	1983.06 [1969.05,1999.12]	0.608	0.0124
WTQ	17.68 [0.46]	16.12 [0.19]	18.56 [0.84]	11.70 [1.14]	-36.97 [6.78]	1987.02 [1985.11,1991.03]	3.61E-007	0.508
WTDQ	23.74 [0.48]	17.97 [0.19]	19.24 [0.85]	12.70 [1.73]	-33.97 [9.46]	1993.04 [1991.07,1998.05]	0.000688	0.0668
WTNQ	24.55 [0.54]	21.63 [0.22]	25.50 [1.31]	17.40 [1.37]	-31.76 [6.40]	1981.07 [1979.06,1987.09]	4.45E-007	0.415
RTQ	17.38 [0.45]	12.87 [0.18]	15.27 [0.80]	8.49 [1.08]	-44.43 [7.63]	1987.02 [1986.05,1991.02]	1.23E-007	0.0359
RTDQ	40.62 [0.69]	27.44 [0.28]	31.83 [1.78]	15.40 [2.95]	-51.62 [9.67]	1990.02 [1989.10,1993.11]	2.88E-007	0.00585
RTNQ	11.60 [0.36]	10.14 [0.15]	13.40 [0.58]	7.01 [0.57]	-47.64 [4.83]	1979.12 [1979.05,1982.01]	5.11E-008	0.148

Inventories

IVMTQ	6.10 [0.23]	4.09 [0.09]	4.61 [0.23]	3.38 [0.26]	-26.70 [6.76]	1984.10 [1982.03,1993.03]	0.0150	0.00131
IVMFGQ	6.30 [0.25]	4.65 [0.10]	5.14 [0.25]	3.88 [0.32]	-24.47 [7.20]	1986.01 [1982.04,1996.02]	0.110	0.0107
IVMFDQ	8.05 [0.28]	6.36 [0.11]	7.17 [0.32]	5.08 [0.41]	-29.11 [6.56]	1986.01 [1983.10,1992.03]	0.0132	0.0578
IVMFNQ	6.25 [0.26]	5.32 [0.10]	5.99 [0.27]	4.12 [0.35]	-31.33 [6.65]	1986.12 [1985.02,1992.03]	4.17E-005	0.105
IVWRQ	12.12 [0.33]	7.91 [0.13]	9.16 [0.45]	6.16 [0.53]	-32.74 [6.68]	1984.12 [1982.11,1990.06]	3.68E-005	0.0193
IVRRQ	11.68 [0.33]	8.43 [0.13]	9.37 [0.44]	6.51 [0.64]	-30.57 [7.54]	1988.01 [1985.04,1994.04]	0.000121	0.00162
IVSRQ	20.67 [0.46]	16.17 [0.19]	17.38 [0.79]	11.69 [1.52]	-32.72 [9.27]	1992.09 [1991.04,1998.07]	0.000793	0.0250
IVSRMQ	32.69 [0.57]	24.78 [0.23]	26.09 [1.20]	19.04 [2.50]	-27.03 [10.17]	1993.07 [1991.08,1999.12]	0.00258	0.00997
IVSRWQ	23.51 [0.50]	20.76 [0.20]	13.76 [2.15]	21.97 [0.90]	59.68 [25.79]	1965.12 [1962.04,1967.08]	1.77E-005	0.296
IVSRRQ	26.08 [0.55]	19.52 [0.22]	20.91 [1.09]	13.77 [2.22]	-34.14 [11.18]	1993.04 [1992.02,1999.12]	0.00184	0.0925

Orders

MOCMQ	37.36 [0.60]	26.90 [0.24]	34.69 [2.45]	24.59 [1.33]	-29.11 [6.30]	1968.09 [1965.01,1974.04]	6.86E-005	0.0206
MDOQ	51.02 [0.68]	36.32 [0.27]	38.07 [1.68]	29.17 [3.39]	-23.36 [9.52]	1993.03 [1989.10,1999.12]	0.00264	0.00219
MSONDQ	94.80 [1.07]	84.28 [0.43]	51.43 [8.08]	92.82 [4.12]	80.47 [29.44]	1967.12 [1964.11,1968.10]	4.01E-005	0.412
MO	30.39 [0.52]	21.83 [0.21]	22.85 [0.98]	17.36 [2.05]	-24.03 [9.55]	1993.07 [1990.04,1999.12]	0.00333	0.00263
MOWU	43.80 [0.63]	32.36 [0.25]	33.76 [1.44]	26.28 [3.01]	-22.14 [9.51]	1993.07 [1989.03,1999.12]	0.0108	0.00190
MDO	50.25 [0.67]	36.42 [0.27]	38.20 [1.66]	29.13 [3.35]	-23.74 [9.38]	1993.03 [1990.01,1999.12]	0.00167	0.000970
MDUWU	52.82 [0.69]	39.51 [0.28]	40.92 [1.77]	33.76 [3.57]	-17.48 [9.43]	1993.03 [1985.12,1999.12]	0.145	0.000940
MNO	18.89 [0.42]	13.19 [0.17]	10.76 [1.05]	14.27 [0.70]	32.59 [14.45]	1972.05 [1962.05,1978.03]	0.0512	0.0120

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Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nI}
MNOU	24.92 [0.52]	22.16 [0.21]	23.84 [1.22]	20.38 [1.26]	-14.51 [6.85]	1981.04 [1968.04,1999.12]	0.447	0.275
MU	17.28 [0.36]	10.73 [0.15]	13.24 [0.61]	8.50 [0.58]	-35.84 [5.27]	1979.04 [1977.10,1982.10]	0.00496	0.00665
MDU	17.59 [0.37]	11.08 [0.15]	13.81 [0.63]	8.66 [0.59]	-37.33 [5.16]	1979.04 [1977.12,1982.06]	0.00791	0.00830
MNU	32.91 [0.52]	19.71 [0.21]	22.12 [1.09]	15.07 [1.51]	-31.86 [7.60]	1987.07 [1985.01,1993.09]	0.0208	0.00784
MPCON	91.54 [1.04]	84.81 [0.42]	55.30 [7.70]	92.48 [3.93]	67.21 [24.34]	1967.12 [1964.06,1968.12]	1.22E-005	0.562
MPCONQ	89.64 [1.03]	84.38 [0.42]	57.40 [7.63]	91.39 [3.89]	59.23 [22.22]	1967.12 [1963.12,1969.04]	5.61E-005	0.647
Consumption								
GMCQ	8.18 [0.29]	6.26 [0.12]	7.16 [0.35]	4.61 [0.47]	-35.52 [7.27]	1987.02 [1985.11,1992.05]	3.65E-005	0.0231
GMCDQ	44.49 [0.67]	29.63 [0.27]	32.60 [1.69]	21.48 [2.79]	-34.12 [9.22]	1990.02 [1988.11,1997.01]	0.0256	0.00139
GMCNQ	8.91 [0.32]	8.33 [0.13]	9.72 [0.42]	5.76 [0.57]	-40.80 [6.35]	1987.03 [1985.11,1990.01]	8.69E-008	0.452
GMCSQ	4.20 [0.23]	3.75 [0.09]	2.61 [0.28]	4.40 [0.21]	68.73 [19.57]	1975.08 [1971.09,1976.09]	2.28E-005	0.280
GMCANQ	132.55 [1.14]	79.71 [0.46]	87.25 [5.00]	58.99 [8.28]	-32.39 [10.25]	1990.02 [1987.10,1999.04]	0.0660	0.000415
Money and credit								
FM1	5.91 [0.26]	5.16 [0.10]	4.03 [0.32]	6.16 [0.30]	52.89 [14.10]	1979.03 [1974.04,1980.09]	0.00830	0.428
FM2	3.41 [0.21]	3.38 [0.09]	1.69 [0.37]	3.69 [0.16]	118.63 [48.85]	1966.03 [1964.01,1966.07]	4.05E-005	0.950
FM3	3.95 [0.21]	3.67 [0.09]	1.87 [0.36]	4.01 [0.16]	113.87 [41.82]	1966.04 [1964.06,1966.09]	0.000112	0.641
FML	4.25 [0.24]	4.93 [0.10]	4.62 [0.22]	5.94 [0.39]	28.42 [10.39]	1990.04 [1981.11,1995.09]	0.114	0.106
FM2DQ	5.35 [0.23]	4.21 [0.09]	2.80 [0.36]	4.65 [0.20]	66.23 [22.60]	1968.12 [1965.05,1969.11]	5.53E-006	0.168
FMFBA	3.04 [0.19]	2.99 [0.08]	2.83 [0.14]	3.54 [0.26]	24.88 [10.81]	1992.06 [1980.10,1999.12]	0.535	0.879
FMBASE	4.07 [0.24]	4.25 [0.09]	3.60 [0.26]	4.86 [0.25]	34.91 [11.97]	1979.09 [1970.09,1983.06]	0.00916	0.712
FMRRR	9.13 [0.36]	11.47 [0.15]	10.08 [0.65]	12.53 [0.57]	24.33 [9.81]	1977.12 [1966.05,1984.11]	0.0577	0.00834
FMRNBA	24.95 [0.56]	16.82 [0.23]	12.59 [1.57]	19.89 [1.33]	58.03 [22.35]	1977.07 [1968.07,1979.12]	0.00806	0.0853
FMRNBC	21.07 [0.47]	15.07 [0.20]	9.96 [1.58]	16.59 [0.86]	66.65 [27.76]	1968.01 [1963.02,1968.10]	1.33E-007	0.0631
FCLS	4.73 [0.29]	3.98 [0.12]	3.63 [0.25]	5.25 [0.47]	44.58 [16.34]	1995.02 [1986.02,1997.02]	0.345	0.317
FCSGV	14.99 [0.48]	11.60 [0.19]	14.54 [0.88]	9.12 [0.80]	-37.27 [6.69]	1987.03 [1985.12,1990.10]	0.0165	0.213
FCLRE	5.72 [0.29]	4.65 [0.12]	6.66 [0.54]	4.23 [0.24]	-36.53 [6.29]	1979.01 [1977.02,1980.06]	0.359	0.239
FCLIN	9.71 [0.35]	7.28 [0.14]	8.49 [0.53]	6.57 [0.41]	-22.69 [6.86]	1985.04 [1980.01,1991.09]	0.704	0.206
FCLNBF	22.59 [0.62]	19.42 [0.30]	14.69 [1.62]	24.76 [1.72]	68.51 [21.95]	1985.09 [1982.08,1987.03]	0.000907	0.497
FCLNQ	13.03 [0.37]	10.44 [0.15]	7.27 [0.85]	11.57 [0.51]	59.17 [19.83]	1969.12 [1965.10,1971.01]	0.0113	0.0104
FCLBMC	31994.50 [26.66]	36387.01 [10.75]	10910.22 [2961.34]	60189.26 [2862.37]	451.68 [152.02]	1979.09 [1978.07,1979.10]	7.27E-011	0.608
CCI30M	84.61 [1.21]	96.66 [0.52]	48.80 [7.66]	128.41 [6.24]	163.13 [43.23]	1973.10 [1971.12,1973.11]	3.07E-019	0.395
CCINT	2935146.02 [317.54]	2817207.84 [121.18]	696125.04 [417596.07]	3427019.14 [223910.95]	392.30 [297.07]	1979.11 [1979.10,1979.11]	1.91E-014	0.856
CCINV	1202895.26 [217.43]	1416917.30 [82.97]	361105.78 [173576.45]	1801484.41 [104757.15]	398.88 [241.55]	1981.02 [1980.07,1981.03]	2.64E-020	0.487
Stock prices								
FSNCOM	62.94 [0.70]	35.27 [0.28]	38.16 [1.94]	28.99 [2.86]	-24.02 [8.42]	1988.06 [1982.11,1999.11]	0.203	8.32E-006
FSNIN	69.53 [0.79]	36.85 [0.32]	41.89 [2.40]	28.58 [3.08]	-31.77 [8.33]	1988.08 [1985.12,1995.05]	0.00611	8.89E-008
FSNTR	87.77 [0.90]	53.09 [0.37]	58.11 [3.02]	43.10 [4.26]	-25.83 [8.28]	1989.11 [1984.10,1997.10]	0.0539	5.89E-010
FSNUT	53.57 [0.69]	33.75 [0.28]	39.88 [2.96]	31.81 [1.66]	-20.24 [7.25]	1976.01 [1970.07,1990.02]	0.204	0.000376
FSNFI	88.37 [0.87]	48.80 [0.36]	58.14 [4.76]	45.81 [2.69]	-21.21 [7.94]	1976.02 [1968.01,1987.09]	0.368	4.70E-005
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Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nI}
FSPCOM	60.65 [0.70]	34.67 [0.28]	36.53 [1.92]	30.55 [2.85]	-16.36 [8.96]	1988.08 [1975.03,1999.12]	0.726	4.10E-005
FSPIN	61.86 [0.70]	35.21 [0.28]	37.54 [1.97]	30.05 [2.93]	-19.96 [8.85]	1988.08 [1980.01,1999.12]	0.339	3.12E-005
FSPCAP	70.70 [0.77]	41.56 [0.31]	44.12 [2.34]	35.89 [3.48]	-18.66 [8.99]	1988.08 [1976.03,1999.12]	0.389	1.48E-005
FSPTR	88.74 [0.98]	51.97 [0.38]	56.51 [3.21]	44.42 [4.14]	-21.40 [8.58]	1989.11 [1982.11,1999.12]	0.187	4.74E-010
FSPUT	57.14 [0.67]	34.81 [0.27]	37.93 [2.41]	32.93 [1.87]	-13.17 [7.41]	1976.01 [1960.02,1999.12]	0.845	0.00158
FSPFI	97.08 [0.99]	52.68 [0.39]	50.53 [2.83]	62.77 [6.13]	24.22 [13.99]	1995.07 [1982.07,1999.12]	0.785	3.23E-005

Dividends and volume

FSDXP	65.01 [0.73]	36.70 [0.29]	35.62 [1.94]	41.79 [4.21]	17.32 [13.43]	1993.12 [1960.02,1999.12]	0.920	4.88E-005
FSPXE	66.02 [0.78]	43.47 [0.31]	39.47 [3.49]	45.42 [2.44]	15.08 [11.90]	1973.01 [1960.02,1999.02]	0.901	0.000261
FSNVV3	46.09 [1.11]	36.85 [0.41]	65.02 [4.44]	26.27 [2.72]	-59.60 [5.02]	1981.02 [1980.10,1982.10]	1.05E-008	0.433

Interest rates

FYFF	1137.33 [3.33]	379.50 [1.34]	457.19 [43.05]	192.68 [66.76]	-57.86 [15.13]	1989.03 [1988.12,1997.09]	0.0202	0.000341
FYCP	1018.21 [3.17]	393.50 [1.32]	168.04 [65.84]	473.97 [39.33]	182.05 [112.97]	1969.04 [1964.03,1969.07]	2.78E-005	0.00842
FYGM3	952.79 [2.96]	334.86 [1.19]	121.62 [71.31]	375.54 [31.15]	208.79 [182.87]	1966.05 [1961.05,1967.02]	0.000183	0.00747
FYGM6	903.29 [2.83]	343.91 [1.14]	126.30 [64.99]	385.42 [28.38]	205.15 [158.61]	1966.05 [1962.05,1967.01]	2.15E-005	0.00953
FYGT1	939.12 [2.86]	382.16 [1.15]	130.55 [65.05]	431.90 [28.92]	230.84 [166.33]	1966.07 [1963.06,1967.01]	3.98E-008	0.0111
FYGT5	641.31 [2.37]	324.67 [0.95]	155.55 [35.56]	382.51 [20.80]	145.90 [57.78]	1969.08 [1966.11,1969.12]	1.40E-012	0.0207
FYGT10	517.81 [2.19]	275.03 [0.88]	180.09 [21.92]	362.87 [21.09]	101.49 [27.18]	1979.08 [1975.11,1980.04]	6.08E-016	0.0382
FYAAAC	403.42 [1.96]	203.78 [0.79]	118.39 [17.51]	282.78 [16.84]	138.85 [38.09]	1979.08 [1976.07,1980.01]	7.56E-012	0.0578
FYBAAC	336.62 [1.83]	200.05 [0.74]	124.98 [15.18]	269.51 [14.60]	115.64 [28.68]	1979.08 [1976.08,1980.01]	1.88E-013	0.0626
FWAFIT	540.06 [2.70]	322.31 [1.27]	482.68 [35.62]	231.39 [26.82]	-52.06 [6.59]	1983.01 [1982.07,1985.02]	0.00108	0.00379
FYFHA	526.19 [2.32]	265.94 [0.94]	141.17 [24.38]	381.38 [23.46]	170.16 [49.54]	1979.08 [1976.08,1979.11]	1.26E-015	0.0639

Exchange rates

EXRUS	26.46 [0.71]	19.88 [0.25]	13.19 [2.17]	21.58 [1.09]	63.66 [28.24]	1979.09 [1976.07,1981.01]	0.0677	0.00934
EXRGER	33.97 [0.86]	31.49 [0.31]	24.35 [3.04]	33.68 [1.69]	38.34 [18.60]	1980.09 [1975.07,1984.03]	0.0715	0.580
EXRSW	41.89 [0.94]	34.69 [0.33]	27.27 [3.60]	36.89 [1.96]	35.30 [19.23]	1980.10 [1975.02,1986.08]	0.507	0.245
EXRJAN	42.72 [0.93]	32.06 [0.32]	24.07 [4.23]	33.55 [1.83]	39.42 [25.63]	1978.09 [1975.02,1982.03]	0.795	0.00779
EXRUK	29.89 [0.88]	29.37 [0.31]	34.32 [1.75]	17.80 [2.67]	-48.12 [8.22]	1993.04 [1992.11,1995.05]	9.83E-009	0.915
EXRCAN	12.64 [0.54]	12.63 [0.19]	11.24 [0.85]	13.75 [0.77]	22.36 [11.54]	1986.12 [1977.06,1997.06]	0.437	0.997

Producer prices

PWFSA	7.95 [0.27]	4.81 [0.11]	5.45 [0.28]	3.09 [0.45]	-43.21 [8.83]	1990.01 [1989.03,1994.03]	9.75E-005	0.0644
PWFCSA	8.71 [0.30]	5.74 [0.12]	6.41 [0.33]	3.88 [0.56]	-39.54 [9.24]	1990.03 [1988.10,1995.04]	0.00146	0.0838
PWIMSA	10.08 [0.31]	5.24 [0.12]	6.14 [0.43]	4.29 [0.44]	-30.11 [8.63]	1981.04 [1978.02,1994.07]	0.0573	0.142
PWCMSA	33.62 [0.61]	20.61 [0.25]	17.93 [1.31]	33.24 [2.85]	85.34 [20.90]	1993.12 [1991.02,1995.08]	0.0204	0.172
PWFXSA	8.34 [0.30]	4.92 [0.13]	5.58 [0.35]	3.63 [0.48]	-34.97 [9.58]	1990.02 [1988.01,1996.12]	0.0369	0.0621
PW160A	23.42 [0.69]	18.99 [0.24]	26.70 [2.28]	17.51 [1.00]	-34.41 [6.72]	1978.10 [1976.10,1980.11]	3.74E-006	0.331
PW150A	24.51 [0.71]	19.07 [0.25]	26.58 [1.81]	16.19 [1.12]	-39.09 [5.90]	1983.03 [1982.03,1986.01]	0.00323	0.0813
PW561	58.32 [1.05]	47.63 [0.42]	18.75 [4.15]	93.58 [5.23]	399.06 [113.79]	1986.01 [1984.05,1986.02]	4.04E-014	0.709
PWCM	7.94 [0.30]	6.06 [0.12]	7.33 [0.40]	4.72 [0.41]	-35.61 [6.64]	1981.04 [1979.10,1987.03]	0.0252	0.360

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Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
PWXFA	10.02 [0.31]	5.08 [0.13]	7.19 [0.72]	4.62 [0.33]	-35.72 [7.92]	1973.10 [1970.06,1977.10]	0.144	0.0650
PSM99Q	25.81 [0.47]	17.33 [0.19]	13.23 [1.34]	19.06 [0.87]	44.10 [16.01]	1971.12 [1965.08,1974.02]	0.000483	0.0132
PSCCOM	26.29 [0.55]	21.52 [0.22]	16.82 [1.77]	23.68 [1.20]	40.84 [16.45]	1972.08 [1963.08,1974.09]	0.0565	0.331
PSCFOO	37.30 [0.69]	31.29 [0.28]	23.00 [2.69]	35.25 [1.86]	53.26 [19.68]	1972.11 [1965.11,1974.01]	0.0189	0.504
PSCMAT	30.91 [0.54]	23.04 [0.22]	19.77 [1.77]	24.42 [1.15]	23.49 [12.47]	1971.12 [1960.02,1979.08]	0.270	0.108
PZFR	23.16 [0.78]	21.41 [0.27]	23.89 [1.54]	18.67 [1.62]	-21.84 [8.46]	1989.02 [1983.02,1999.10]	0.188	0.637
PCGOLD	80.43 [1.37]	47.09 [0.47]	76.97 [6.71]	37.19 [3.86]	-51.69 [6.55]	1983.03 [1982.09,1986.05]	0.0150	0.0204

Consumer prices

PUNEW	4.48 [0.20]	2.98 [0.08]	2.04 [0.23]	3.45 [0.16]	69.10 [20.79]	1973.01 [1969.01,1973.10]	9.42E-005	0.0703
PU81	5.37 [0.30]	4.34 [0.12]	6.85 [0.47]	3.13 [0.33]	-54.24 [5.69]	1979.02 [1978.10,1982.04]	8.57E-005	0.341
PUH	5.51 [0.23]	2.67 [0.10]	4.37 [0.24]	1.52 [0.20]	-65.14 [4.87]	1983.01 [1982.10,1984.06]	8.83E-006	0.00167
PU83	3.51 [0.24]	4.14 [0.10]	3.20 [0.23]	5.64 [0.28]	75.97 [15.20]	1986.01 [1982.11,1986.10]	3.49E-005	0.354
PU84	9.15 [0.31]	6.32 [0.12]	6.87 [0.39]	5.33 [0.52]	-22.44 [8.82]	1987.02 [1977.10,1999.12]	0.349	0.0431
PU85	4.13 [0.19]	3.10 [0.08]	3.64 [0.16]	2.50 [0.17]	-31.50 [5.62]	1983.03 [1981.09,1987.12]	0.0603	0.165
PUC	5.48 [0.24]	3.84 [0.09]	4.55 [0.25]	3.11 [0.26]	-31.54 [6.80]	1981.02 [1976.09,1986.06]	0.00510	0.0336
PUCD	5.70 [0.22]	3.53 [0.09]	4.36 [0.20]	2.29 [0.24]	-47.45 [6.07]	1985.07 [1985.01,1988.02]	2.90E-006	0.0405
PUS	5.10 [0.21]	3.28 [0.08]	3.93 [0.20]	2.57 [0.20]	-34.60 [6.14]	1982.12 [1982.04,1988.07]	0.0987	0.0684
PUXF	5.01 [0.20]	3.07 [0.08]	2.42 [0.20]	3.59 [0.18]	48.39 [14.62]	1978.02 [1971.06,1979.06]	0.0308	0.0256
PUXHS	4.41 [0.21]	3.27 [0.08]	2.58 [0.26]	3.54 [0.17]	37.53 [15.48]	1971.08 [1962.04,1972.11]	0.0833	0.166
PUXM	4.62 [0.21]	3.24 [0.08]	2.49 [0.24]	3.60 [0.17]	44.88 [15.55]	1973.01 [1966.01,1973.12]	0.0690	0.0807
GMDC	3.58 [0.18]	2.40 [0.07]	1.36 [0.18]	2.91 [0.12]	113.50 [28.93]	1973.02 [1971.03,1973.08]	2.56E-007	0.162
GMDCD	5.26 [0.22]	3.09 [0.09]	3.62 [0.21]	2.52 [0.22]	-30.32 [7.41]	1981.07 [1979.02,1990.12]	0.0127	0.0422
GMDCN	5.40 [0.24]	3.72 [0.10]	4.09 [0.21]	2.72 [0.35]	-33.42 [9.30]	1990.02 [1987.11,1997.01]	0.00951	0.0847
GMDCS	2.98 [0.17]	2.12 [0.07]	1.17 [0.15]	2.64 [0.11]	126.14 [29.88]	1975.04 [1973.08,1975.09]	1.98E-009	0.138

Miscellaneous

PMI	3381.23 [6.07]	2757.30 [2.45]	3219.43 [157.28]	2131.44 [183.03]	-33.79 [6.54]	1984.09 [1982.11,1989.10]	0.00226	0.272
PMP	4471.33 [7.47]	4000.86 [3.01]	4628.21 [239.66]	3159.64 [277.52]	-31.73 [6.96]	1984.08 [1982.09,1991.05]	0.00615	0.437
PMNO	4619.97 [7.72]	4317.40 [3.11]	4677.89 [257.55]	3824.32 [301.22]	-18.25 [7.86]	1984.10 [1976.06,1999.12]	0.359	0.680
PMDEL	5389.73 [7.66]	3475.54 [3.09]	4503.36 [244.20]	2069.67 [285.60]	-54.04 [6.81]	1984.10 [1984.06,1987.09]	6.67E-010	0.0742
PMNV	4055.20 [6.98]	3720.26 [2.82]	4234.19 [212.85]	3077.15 [238.11]	-27.33 [6.71]	1984.01 [1980.05,1991.06]	0.00498	0.528
PMEMP	3645.26 [6.37]	3101.73 [2.57]	3527.27 [160.02]	2228.58 [229.22]	-36.82 [7.10]	1988.01 [1986.12,1992.05]	0.000291	0.151
PMCP	5686.38 [8.07]	4564.44 [3.25]	5083.96 [274.76]	3786.72 [336.16]	-25.52 [7.74]	1985.07 [1980.04,1995.11]	0.0516	0.167
HHSNTN	4841.70 [7.51]	3763.40 [3.03]	2043.97 [261.36]	5097.45 [230.22]	149.39 [33.82]	1978.02 [1976.05,1978.05]	6.57E-014	0.255
F6EDM	90.41 [1.27]	102.54 [0.50]	142.04 [10.31]	92.05 [5.32]	-35.20 [6.01]	1972.04 [1971.01,1978.02]	0.00516	0.151
FTMC6	149.66 [1.34]	117.89 [0.55]	127.49 [6.25]	86.28 [11.34]	-32.33 [9.49]	1991.06 [1989.12,1997.02]	0.0124	0.126
FTMM6	94.21 [1.15]	77.54 [0.46]	94.73 [4.95]	51.82 [6.06]	-45.29 [7.00]	1987.03 [1986.09,1990.07]	9.13E-009	0.308

Results for SupW tests for structural change in unconditional volatility during expansions for individual series, when allowing for a single structural change in the unconditional mean. The columns headed σ_R and σ_0 contain estimates of the unconditional standard deviation during recessions and expansions under the null hypothesis, respectively. Columns headed σ_1 and σ_2 contain estimates of the unconditional standard deviation during expansions before and after the break, respectively. The column headed $\Delta\sigma$ contains the percent change in standard deviation. The estimated volatility break date is given in the column headed τ_v , with the 90% confidence interval given in brackets. The column headed p-value_v contains the asymptotic p-value of the corresponding SupW test. The column headed p-value_{nl} contains the asymptotic p-value of the Wald test for nonlinearity in unconditional volatility. Figures in brackets below parameter estimates are standard errors.

Table A.8: Tests for structural change in recession volatility

Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
Production								
IP	7.56 [0.14]	16.59 [0.34]	13.07 [1.32]	19.80 [1.27]	51.45 [18.15]	1974.10 [1969.04,1980.12]	0.196	1.18E-006
IPP	7.77 [0.13]	14.35 [0.32]	11.82 [1.24]	16.54 [1.16]	39.91 [17.68]	1974.09 [1964.08,1984.07]	0.442	5.65E-006
IPF	8.36 [0.14]	14.72 [0.34]	12.72 [1.33]	16.54 [1.27]	30.01 [16.85]	1974.10 [1960.02,1993.06]	0.000262	1.56E-006
IPC	9.94 [0.15]	14.08 [0.37]	16.38 [1.43]	10.45 [1.80]	-36.20 [12.34]	1980.05 [1975.06,1997.06]	7.07E-012	0.00952
IPCD	24.85 [0.26]	36.27 [0.64]	30.38 [4.88]	41.66 [4.67]	37.15 [26.88]	1974.10 [1960.02,1999.12]	1.63E-013	0.00191
IPCN	8.63 [0.13]	9.25 [0.32]	10.91 [1.13]	7.21 [1.25]	-33.92 [13.38]	1975.03 [1962.08,1995.11]	0.0156	0.588
IPE	12.33 [0.17]	21.49 [0.41]	15.98 [2.06]	25.69 [1.80]	60.78 [23.63]	1974.07 [1967.09,1979.07]	0.00948	0.000236
IPI	9.57 [0.15]	15.74 [0.37]	11.89 [1.61]	19.05 [1.50]	60.16 [25.10]	1974.09 [1967.03,1981.09]	5.94E-014	0.00344
IPM	10.00 [0.16]	20.76 [0.40]	16.34 [1.85]	24.79 [1.76]	51.69 [20.25]	1974.10 [1968.02,1982.06]	0.0145	2.65E-005
IPMD	14.14 [0.19]	30.60 [0.48]	33.86 [2.16]	20.24 [3.86]	-40.23 [12.03]	1982.03 [1980.04,1991.08]	0.00243	2.79E-008
IPMND	11.50 [0.17]	21.78 [0.42]	11.65 [2.07]	30.50 [1.92]	161.93 [49.29]	1974.09 [1972.03,1975.06]	0.0448	0.0102
IPMFG	8.13 [0.14]	18.74 [0.36]	14.64 [1.49]	22.49 [1.42]	53.69 [18.43]	1974.10 [1969.08,1980.05]	0.0866	6.33E-007
IPD	10.88 [0.17]	23.43 [0.42]	18.75 [2.07]	27.71 [1.98]	47.79 [19.47]	1974.10 [1968.08,1985.05]	0.0253	1.51E-008
IPN	7.73 [0.14]	12.81 [0.34]	9.04 [1.33]	16.07 [1.24]	77.80 [29.59]	1974.09 [1968.06,1978.05]	0.00129	0.0150
IPMIN	12.92 [0.17]	15.12 [0.43]	10.86 [2.39]	18.00 [1.96]	65.67 [40.70]	1974.05 [1960.02,1985.04]	0.229	0.314
IPUT	18.62 [0.21]	15.98 [0.52]	6.22 [4.78]	18.56 [2.45]	198.47 [232.62]	1970.04 [1960.02,1973.04]	4.34E-010	0.274
IPX	596.44 [1.37]	1270.04 [3.28]	868.38 [128.19]	1522.51 [101.63]	75.33 [28.40]	1974.10 [1971.05,1979.06]	0.126	5.72E-005
IPXMCA	677.64 [1.30]	1375.47 [3.22]	1543.55 [97.35]	881.10 [166.95]	-42.92 [11.40]	1982.02 [1980.01,1989.08]	0.0802	1.97E-005
IPXDCA	833.46 [1.66]	1682.08 [3.98]	1897.23 [141.36]	1175.84 [216.84]	-38.02 [12.33]	1982.02 [1978.12,1993.02]	0.129	5.17E-006
IPXNCA	656.88 [1.36]	1053.75 [3.25]	1233.32 [91.32]	550.95 [152.80]	-55.33 [12.82]	1982.04 [1980.07,1987.06]	0.00170	0.0280
IPXMIN	1145.55 [1.86]	1523.24 [4.44]	926.37 [269.72]	1776.91 [175.83]	91.82 [58.99]	1974.05 [1968.02,1979.05]	0.0814	0.0897
IPXUT	1802.12 [2.24]	1527.53 [5.35]	1457.62 [221.37]	2785.83 [939.19]	91.12 [70.67]	1990.12 [1985.09,1998.02]	8.29E-007	0.170
GMPYQ	4.14 [0.10]	6.73 [0.25]	7.71 [0.66]	5.19 [0.83]	-32.60 [12.28]	1980.05 [1972.09,1998.12]	3.97E-027	2.53E-005
GMYXPQ	4.14 [0.09]	7.43 [0.24]	5.75 [0.84]	8.10 [0.53]	40.94 [22.69]	1970.09 [1960.02,1977.04]	1.72E-015	1.63E-006
(Un)employment								
LHEL	2416.96 [2.29]	3393.73 [5.68]	1615.66 [678.57]	3705.68 [284.22]	129.36 [97.92]	1965.12 [1960.02,1967.10]	9.87E-007	0.0141
LHELX	47.68 [0.34]	82.40 [0.84]	106.72 [7.10]	44.05 [8.91]	-58.72 [8.79]	1980.05 [1979.05,1984.05]	0.0137	0.0152
LHEM	3.24 [0.09]	4.58 [0.22]	6.23 [1.00]	4.30 [0.42]	-31.03 [12.97]	1965.12 [1960.03,1999.12]	0.00997	0.00878
LHNAG	3.02 [0.08]	4.66 [0.20]	6.23 [0.86]	4.39 [0.36]	-29.58 [11.35]	1965.12 [1960.02,1986.05]	5.14E-007	0.000427
LHUR	187.68 [0.65]	324.37 [1.62]	256.42 [31.77]	379.45 [28.61]	47.98 [21.46]	1974.08 [1964.11,1983.03]	0.630	2.30E-005
LHU680	558.69 [1.08]	538.07 [2.68]	962.55 [150.99]	463.60 [63.24]	-51.84 [10.01]	1965.12 [1962.11,1974.04]	0.00113	0.804
LHU5	59.14 [0.35]	58.45 [0.87]	96.39 [14.62]	50.17 [6.83]	-47.95 [10.61]	1970.02 [1966.03,1979.07]	5.79E-006	0.935
LHU14	62.40 [0.35]	72.83 [0.88]	89.34 [7.86]	45.07 [10.19]	-49.55 [12.23]	1980.06 [1976.12,1989.02]	1.33E-005	0.263
LHU15	59.12 [0.36]	89.99 [0.88]	106.48 [8.19]	65.55 [9.96]	-38.44 [10.49]	1980.04 [1975.05,1990.02]	1.04E-005	0.00197
LHU26	93.10 [0.43]	103.51 [1.05]	154.07 [18.42]	87.65 [10.32]	-43.11 [9.55]	1970.06 [1965.08,1978.03]	4.39E-010	0.414
LHU27	81.81 [0.42]	100.76 [1.04]	117.89 [10.76]	67.98 [14.88]	-42.34 [13.68]	1981.08 [1977.05,1995.08]	0.00274	0.179
LHCH	258.00 [0.81]	177.46 [1.85]	132.21 [54.15]	194.08 [32.82]	46.79 [65.05]	1970.08 [1960.02,1995.02]	0.182	7.29E-006

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Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
LPNAG	1.96 [0.07]	5.30 [0.17]	4.57 [0.34]	5.96 [0.32]	30.38 [11.86]	1974.10 [1968.02,1986.05]	0.0835	2.10E-010
LP	2.33 [0.08]	5.93 [0.19]	4.79 [0.41]	6.98 [0.39]	45.63 [15.01]	1974.10 [1970.07,1981.09]	0.811	3.62E-008
LPGD	3.94 [0.10]	10.95 [0.26]	8.90 [0.77]	12.82 [0.74]	44.04 [15.04]	1974.10 [1970.01,1982.02]	0.122	1.60E-007
LPMI	9.33 [0.16]	14.18 [0.39]	15.40 [1.33]	5.20 [3.60]	-66.21 [23.57]	1982.11 [1979.08,1988.08]	0.00185	0.0805
LPCC	10.06 [0.18]	16.06 [0.43]	11.43 [2.63]	18.47 [1.90]	61.57 [40.71]	1974.01 [1968.08,1999.12]	0.135	0.00556
LPEM	3.66 [0.10]	10.50 [0.26]	8.38 [0.79]	12.44 [0.76]	48.50 [16.67]	1974.10 [1970.07,1982.07]	0.00965	6.32E-007
LPED	4.94 [0.13]	14.26 [0.31]	15.11 [0.83]	8.00 [2.26]	-47.06 [15.22]	1982.11 [1981.12,1988.12]	0.000453	4.63E-008
LPEN	2.69 [0.09]	6.30 [0.22]	4.34 [0.57]	7.98 [0.53]	84.00 [27.15]	1974.09 [1970.04,1976.12]	0.0423	0.00249
LPSP	1.56 [0.06]	3.10 [0.14]	4.56 [0.43]	2.85 [0.18]	-37.55 [7.12]	1965.12 [1963.09,1971.06]	0.000185	5.78E-007
LPTU	4.56 [0.12]	5.50 [0.30]	7.77 [1.39]	4.67 [0.84]	-39.96 [15.20]	1970.08 [1960.02,1996.11]	0.0170	0.236
LPT	2.40 [0.08]	4.67 [0.20]	6.50 [0.80]	4.35 [0.34]	-33.10 [9.73]	1965.12 [1963.03,1985.09]	0.0710	4.98E-007
LPFR	1.89 [0.06]	2.50 [0.15]	1.70 [0.27]	3.08 [0.23]	81.03 [32.00]	1974.06 [1968.05,1978.01]	0.0589	0.109
LPS	1.95 [0.06]	2.95 [0.16]	2.60 [0.24]	3.89 [0.40]	49.38 [20.49]	1982.01 [1978.03,1993.05]	2.36E-010	0.00224
LPGOV	2.15 [0.08]	4.12 [0.21]	4.41 [0.37]	1.20 [1.19]	-72.83 [26.99]	1990.09 [1990.03,1995.11]	1.20E-007	0.00146
LW	116.99 [0.61]	187.47 [1.54]	220.15 [20.89]	103.75 [33.45]	-52.87 [15.84]	1982.03 [1977.09,1990.04]	0.155	0.0212
LPHRM	232.79 [0.83]	353.80 [2.06]	407.09 [39.09]	169.05 [72.77]	-58.47 [18.32]	1982.04 [1980.09,1992.12]	5.50E-008	0.0334
LPMOSA	129.63 [0.62]	179.44 [1.54]	202.31 [21.40]	84.42 [43.63]	-58.27 [22.01]	1982.06 [1978.12,1994.08]	1.63E-008	0.0709

Wages and salaries

LEH	2.61 [0.08]	3.30 [0.21]	3.95 [0.36]	1.11 [0.66]	-71.88 [16.82]	1982.06 [1980.09,1987.06]	1.13E-008	0.233
LEHCC	5.70 [0.12]	7.69 [0.31]	5.76 [1.16]	9.17 [1.02]	59.18 [36.69]	1974.07 [1964.01,1997.11]	0.0152	0.0579
LEHM	3.32 [0.09]	4.90 [0.23]	5.60 [0.48]	1.99 [0.97]	-64.41 [17.56]	1982.06 [1980.07,1988.11]	4.02E-011	0.00947
LEHTU	4.46 [0.11]	4.48 [0.27]	3.10 [1.02]	5.06 [0.67]	62.98 [57.93]	1974.05 [1965.02,1999.12]	0.00375	0.983
LEHTT	2.90 [0.08]	3.33 [0.21]	3.81 [0.35]	0.41 [0.86]	-89.23 [22.69]	1982.11 [1981.05,1986.05]	3.57E-019	0.402
LEHFR	5.69 [0.12]	7.07 [0.31]	3.91 [1.29]	8.42 [0.84]	115.50 [74.24]	1974.05 [1966.07,1978.07]	0.000441	0.250
LEHS	3.42 [0.10]	4.64 [0.24]	5.92 [0.52]	1.85 [0.77]	-68.78 [13.32]	1982.01 [1980.04,1986.08]	1.56E-020	0.0670

Construction

HSFR	86.15 [0.44]	135.81 [1.09]	129.36 [10.02]	215.86 [35.27]	66.87 [30.17]	1990.10 [1988.11,1995.06]	2.10E-006	5.10E-006
HSNE	209.44 [0.67]	296.69 [1.67]	253.66 [31.28]	343.75 [32.72]	35.52 [21.11]	1975.01 [1960.02,1999.11]	0.00350	0.000516
HSMW	177.96 [0.63]	208.38 [1.57]	185.90 [19.94]	687.96 [92.12]	270.06 [63.50]	1990.12 [1990.07,1991.07]	1.81E-013	0.275
HSSOU	105.74 [0.49]	159.74 [1.22]	140.76 [13.62]	225.52 [25.36]	60.21 [23.77]	1982.04 [1975.12,1988.05]	4.33E-015	0.000633
HSWST	138.61 [0.53]	179.74 [1.31]	251.78 [33.04]	164.02 [15.43]	-34.85 [10.52]	1970.02 [1963.04,1980.04]	3.74E-009	0.00956
HSBR	64.45 [0.39]	98.52 [0.98]	59.09 [12.62]	121.99 [9.73]	106.43 [47.06]	1974.03 [1969.02,1978.04]	0.00117	0.0221
HSBNE	131.29 [0.56]	152.04 [1.48]	172.55 [18.90]	81.03 [35.17]	-53.04 [21.02]	1982.06 [1976.07,1995.12]	1.96E-007	0.382
HSBMW	110.81 [0.54]	156.95 [1.44]	175.26 [17.15]	69.08 [37.57]	-60.58 [21.78]	1982.09 [1976.01,1989.02]	0.000220	0.0918
HSBSOU	82.55 [0.43]	114.55 [1.14]	77.22 [18.67]	128.77 [11.53]	66.75 [43.00]	1974.03 [1961.08,1982.05]	2.38E-006	0.00661
HSBWST	96.09 [0.48]	141.42 [1.28]	20.56 [46.93]	150.37 [12.77]	631.31 [1670.22]	1970.03 [1966.10,1971.07]	3.26E-009	0.0220
HNS	79.38 [0.42]	124.23 [1.09]	85.39 [12.99]	156.82 [11.90]	83.66 [31.22]	1975.02 [1970.07,1978.10]	2.75E-006	0.0103
HNSNE	210.28 [0.87]	248.93 [2.15]	151.81 [46.12]	322.75 [40.21]	112.61 [69.81]	1980.06 [1974.02,1984.02]	0.00967	0.552
HNSMW	150.12 [0.73]	225.79 [1.79]	212.21 [21.75]	411.35 [80.41]	93.84 [42.78]	1990.12 [1988.09,1993.04]	6.12E-007	0.0276

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Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
HNSSOU	112.97 [0.60]	164.88 [1.48]	188.40 [17.68]	119.39 [24.58]	-36.63 [14.34]	1982.04 [1975.02,1993.09]	1.63E-005	0.0108
HNSWST	138.45 [0.68]	212.76 [1.68]	275.33 [23.57]	122.39 [28.33]	-55.55 [10.97]	1982.01 [1979.05,1985.04]	0.00282	0.0236
HNR	518.08 [1.16]	1085.07 [2.98]	725.26 [96.53]	1386.85 [88.41]	91.22 [28.22]	1975.02 [1971.09,1976.09]	0.0894	0.000660
HMOB	47.30 [0.34]	93.15 [0.84]	115.02 [6.99]	51.33 [9.67]	-55.38 [8.83]	1981.08 [1980.07,1985.06]	3.82E-006	0.000252
CONTC	17.03 [0.21]	27.48 [0.52]	31.49 [2.68]	21.97 [3.15]	-30.25 [11.63]	1980.07 [1973.09,1999.08]	0.141	0.00267
CONPC	17.69 [0.21]	29.38 [0.54]	33.58 [2.93]	23.99 [3.31]	-28.55 [11.66]	1980.06 [1974.05,1999.12]	0.0573	0.00159
CONQC	34.61 [0.29]	46.46 [0.74]	44.12 [4.25]	88.65 [18.02]	100.94 [45.19]	1990.12 [1989.03,1993.08]	6.59E-012	0.0463
CONDO9	110.51 [0.49]	130.96 [1.23]	36.83 [28.71]	151.50 [13.41]	311.31 [322.67]	1970.02 [1965.11,1972.02]	9.36E-014	0.285

Trade

MSMTQ	11.51 [0.15]	15.21 [0.38]	12.05 [1.79]	17.62 [1.57]	46.22 [25.34]	1974.07 [1960.04,1987.10]	0.00369	0.0274
MSMQ	15.89 [0.18]	20.88 [0.45]	18.29 [2.41]	23.24 [2.30]	27.08 [20.94]	1974.10 [1960.02,1999.12]	4.08E-018	0.00352
MSDQ	23.04 [0.22]	27.59 [0.55]	22.47 [3.55]	32.27 [3.39]	43.62 [27.25]	1974.10 [1960.02,1999.05]	9.81E-054	0.0790
MSNQ	12.68 [0.16]	16.38 [0.40]	13.41 [2.40]	17.65 [1.57]	31.63 [26.33]	1970.10 [1960.02,1997.02]	8.33E-012	0.0124
WTQ	16.12 [0.19]	17.68 [0.46]	11.80 [2.86]	20.97 [2.14]	77.74 [46.73]	1974.02 [1966.02,1989.04]	3.80E-013	0.508
WTDQ	17.97 [0.19]	23.74 [0.48]	17.06 [3.32]	27.00 [2.32]	58.26 [33.65]	1973.12 [1961.04,1983.02]	6.13E-013	0.0668
WTNQ	21.63 [0.22]	24.55 [0.54]	16.03 [4.24]	28.44 [2.86]	77.38 [50.15]	1970.11 [1960.04,1983.08]	2.53E-009	0.415
RTQ	12.87 [0.18]	17.38 [0.45]	10.25 [2.96]	20.41 [1.93]	99.22 [60.59]	1970.10 [1963.01,1978.11]	0.00789	0.0359
RTDQ	27.44 [0.28]	40.62 [0.69]	30.65 [5.86]	48.22 [5.12]	57.30 [34.38]	1974.07 [1960.02,1989.12]	2.11E-016	0.00585
RTNQ	10.14 [0.15]	11.60 [0.36]	13.46 [1.48]	9.57 [1.55]	-28.91 [13.89]	1975.01 [1960.08,1999.12]	0.0110	0.148

Inventories

IVMTQ	4.09 [0.09]	6.10 [0.23]	5.97 [0.43]	14.20 [3.51]	137.67 [61.25]	1991.02 [1990.09,1992.03]	7.41E-035	0.00131
IVMFGQ	4.65 [0.10]	6.30 [0.25]	8.71 [1.21]	5.83 [0.54]	-33.09 [11.17]	1970.01 [1961.12,1981.03]	2.13E-005	0.0107
IVMFDQ	6.36 [0.11]	8.05 [0.28]	12.89 [1.64]	7.20 [0.69]	-44.12 [8.91]	1965.12 [1962.05,1971.01]	0.000488	0.0578
IVMFNQ	5.32 [0.10]	6.25 [0.26]	6.53 [0.58]	4.64 [1.39]	-28.92 [22.15]	1982.09 [1962.10,1999.12]	0.000512	0.105
IVWRQ	7.91 [0.13]	12.12 [0.33]	19.98 [2.21]	10.74 [0.93]	-46.21 [7.56]	1965.12 [1963.07,1969.11]	0.0234	0.0193
IVRRQ	8.43 [0.13]	11.68 [0.33]	11.49 [0.92]	24.21 [7.47]	110.77 [67.18]	1991.02 [1990.04,1993.02]	7.04E-039	0.00162
IVSRQ	16.17 [0.19]	20.67 [0.46]	15.54 [2.60]	24.83 [2.34]	59.82 [30.69]	1974.08 [1961.04,1981.08]	3.38E-027	0.0250
IVSRMQ	24.78 [0.23]	32.69 [0.57]	25.98 [3.89]	38.84 [3.72]	49.52 [26.56]	1974.10 [1960.06,1986.12]	0.00961	0.00997
IVSRWQ	20.76 [0.20]	23.51 [0.50]	16.77 [3.03]	29.32 [2.81]	74.90 [35.74]	1974.09 [1965.09,1982.02]	0.000894	0.296
IVSRRQ	19.52 [0.22]	26.08 [0.55]	15.40 [3.74]	33.75 [3.17]	119.16 [57.01]	1974.06 [1967.06,1977.05]	9.54E-009	0.0925

Orders

MOCMQ	26.90 [0.24]	37.36 [0.60]	29.00 [4.36]	44.13 [3.93]	52.18 [26.58]	1974.08 [1965.05,1989.07]	0.0116	0.0206
MDOQ	36.32 [0.27]	51.02 [0.68]	40.01 [5.56]	59.95 [5.00]	49.83 [24.28]	1974.08 [1963.06,1984.09]	1.84E-023	0.00219
MSONDQ	84.28 [0.43]	94.80 [1.07]	82.10 [9.86]	176.59 [25.03]	115.09 [39.96]	1982.10 [1979.09,1985.09]	4.58E-006	0.412
MO	21.83 [0.21]	30.39 [0.52]	33.23 [2.57]	22.67 [4.25]	-31.78 [13.83]	1982.01 [1970.02,1996.09]	1.26E-032	0.00263
MOWU	32.36 [0.25]	43.80 [0.63]	34.98 [4.81]	50.95 [4.33]	45.62 [23.56]	1974.08 [1960.08,1985.01]	8.24E-020	0.00190
MDO	36.42 [0.27]	50.25 [0.67]	42.19 [5.52]	56.79 [4.97]	34.58 [21.19]	1974.08 [1960.02,1993.07]	2.58E-033	0.000970
MDUWU	39.51 [0.28]	52.82 [0.69]	41.93 [5.85]	61.64 [5.27]	47.01 [24.05]	1974.08 [1961.10,1985.10]	6.46E-028	0.000940
MNO	13.19 [0.17]	18.89 [0.42]	21.81 [2.03]	15.88 [2.06]	-27.19 [11.64]	1974.12 [1960.02,1993.08]	0.000265	0.0120

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Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
MNOU	22.16 [0.21]	24.92 [0.52]	36.54 [5.61]	22.88 [2.35]	-37.36 [11.58]	1965.12 [1960.02,1971.07]	1.32E-009	0.275
MU	10.73 [0.15]	17.28 [0.36]	23.59 [1.38]	9.51 [1.54]	-59.68 [6.92]	1975.03 [1973.12,1977.07]	4.14E-014	0.00665
MDU	11.08 [0.15]	17.59 [0.37]	23.88 [1.43]	9.83 [1.59]	-58.85 [7.09]	1975.03 [1973.10,1977.09]	1.18E-013	0.00830
MNU	19.71 [0.21]	32.91 [0.52]	36.76 [2.42]	15.29 [5.17]	-58.40 [14.33]	1982.07 [1980.10,1987.01]	1.59E-009	0.00784
MPCON	84.81 [0.42]	91.54 [1.04]	41.73 [22.75]	100.28 [9.53]	140.31 [132.96]	1965.12 [1960.02,1968.11]	2.27E-005	0.562
MPCONQ	84.38 [0.42]	89.64 [1.03]	41.63 [22.48]	98.06 [9.41]	135.56 [129.18]	1965.12 [1960.02,1969.02]	5.51E-005	0.647
Consumption								
GMCQ	6.26 [0.12]	8.18 [0.29]	7.01 [1.05]	9.13 [0.95]	30.24 [23.79]	1974.08 [1960.02,1999.12]	1.06E-005	0.0231
GMCDQ	29.63 [0.27]	44.49 [0.67]	35.22 [5.48]	51.57 [4.79]	46.41 [26.52]	1974.07 [1960.02,1984.11]	2.62E-013	0.00139
GMCNQ	8.33 [0.13]	8.91 [0.32]	12.63 [2.11]	8.19 [0.94]	-35.18 [13.14]	1970.01 [1961.02,1987.03]	0.166	0.452
GMCSQ	3.75 [0.09]	4.20 [0.23]	3.21 [0.62]	5.06 [0.58]	57.78 [35.44]	1974.09 [1960.02,1981.09]	3.81E-028	0.280
GMCANQ	79.71 [0.46]	132.55 [1.14]	125.54 [10.85]	282.23 [50.10]	124.82 [44.39]	1990.12 [1990.06,1992.10]	2.07E-007	0.000415
Money and credit								
FM1	5.16 [0.10]	5.91 [0.26]	4.44 [0.73]	7.73 [0.82]	74.19 [34.20]	1975.03 [1963.07,1979.02]	0.0152	0.428
FM2	3.38 [0.09]	3.41 [0.21]	5.18 [0.81]	2.94 [0.41]	-43.20 [11.92]	1970.04 [1961.03,1977.04]	0.00366	0.950
FM3	3.67 [0.09]	3.95 [0.21]	5.78 [0.66]	3.17 [0.43]	-45.26 [9.72]	1970.10 [1966.08,1980.05]	0.0139	0.641
FML	4.93 [0.10]	4.25 [0.24]	6.13 [0.95]	3.66 [0.53]	-40.21 [12.67]	1970.06 [1961.07,1984.07]	0.000388	0.106
FM2DQ	4.21 [0.09]	5.35 [0.23]	2.29 [1.14]	5.89 [0.48]	156.72 [128.89]	1965.12 [1960.05,1967.08]	0.000201	0.168
FMFBA	2.99 [0.08]	3.04 [0.19]	2.86 [0.30]	6.99 [1.40]	144.87 [55.34]	1990.12 [1988.08,1992.04]	2.15E-013	0.879
FMBASE	4.25 [0.09]	4.07 [0.24]	3.40 [0.59]	4.99 [0.70]	46.86 [32.83]	1980.03 [1960.02,1995.05]	0.222	0.712
FMRRA	11.47 [0.15]	9.13 [0.36]	8.69 [1.10]	16.10 [4.37]	85.34 [55.47]	1990.11 [1984.03,1997.03]	2.51E-021	0.00834
FMRNBA	16.82 [0.23]	24.95 [0.56]	30.70 [3.19]	15.29 [4.14]	-50.18 [14.44]	1980.06 [1968.06,1985.03]	0.00141	0.0853
FMRNBC	15.07 [0.20]	21.07 [0.47]	24.37 [2.30]	15.87 [2.89]	-34.88 [13.37]	1980.05 [1967.06,1993.02]	0.000261	0.0631
FCLS	3.98 [0.12]	4.73 [0.29]	6.51 [0.83]	3.37 [0.72]	-48.27 [12.85]	1980.06 [1974.05,1986.06]	0.0139	0.317
FCSGV	11.60 [0.19]	14.99 [0.48]	20.97 [1.97]	7.80 [2.16]	-62.80 [10.89]	1981.11 [1980.03,1986.01]	1.58E-010	0.213
FCLRE	4.65 [0.12]	5.72 [0.29]	6.47 [0.61]	2.35 [1.30]	-63.67 [20.42]	1982.11 [1978.11,1986.02]	3.86E-009	0.239
FCLIN	7.28 [0.14]	9.71 [0.35]	12.04 [1.19]	7.77 [1.09]	-35.51 [11.06]	1980.07 [1975.03,1991.09]	0.133	0.206
FCLNBF	19.42 [0.30]	22.59 [0.62]	33.13 [3.82]	14.58 [3.33]	-56.00 [11.27]	1980.06 [1977.05,1983.01]	0.0337	0.497
FCLNQ	10.44 [0.15]	13.03 [0.37]	10.27 [2.07]	14.12 [1.30]	37.44 [30.39]	1970.09 [1960.02,1981.06]	1.55E-046	0.0104
FCLBMC	36387.01 [10.75]	31994.50 [26.66]	25883.41 [6024.02]	94123.89 [19207.71]	263.65 [112.56]	1990.09 [1983.12,1991.03]	1.41E-078	0.608
CCI30M	96.66 [0.52]	84.61 [1.21]	46.09 [17.24]	119.83 [16.49]	160.01 [103.66]	1974.10 [1963.04,1976.07]	0.000104	0.395
CCINT	2817207.84 [121.18]	2935146.02 [317.54]	8540593.50 [3002179.89]	2741854.73 [557490.81]	-67.90 [13.04]	1980.02 [1978.05,1980.10]	2.04E-029	0.856
CCINV	1416917.30 [82.97]	1202895.26 [217.43]	875516.72 [307037.28]	1966778.53 [469007.19]	124.64 [95.27]	1982.10 [1976.02,1986.06]	0.000540	0.487
Stock prices								
FSNCOM	35.27 [0.28]	62.94 [0.70]	37.10 [9.01]	69.16 [4.42]	86.43 [46.80]	1970.03 [1964.09,1973.06]	4.99E-007	8.32E-006
FSNIN	36.85 [0.32]	69.53 [0.79]	52.59 [8.27]	77.35 [5.62]	47.08 [25.47]	1974.06 [1967.02,1982.09]	2.55E-007	8.89E-008
FSNTR	53.09 [0.37]	87.77 [0.90]	89.11 [6.09]	12.49 [45.61]	-85.99 [51.19]	1991.02 [1990.02,1993.01]	1.50E-047	5.89E-010
FSNUT	33.75 [0.28]	53.57 [0.69]	65.42 [4.74]	39.43 [5.18]	-39.73 [9.04]	1980.05 [1977.02,1986.12]	1.87E-015	0.000376
FSNFI	48.80 [0.36]	88.37 [0.87]	80.28 [6.33]	122.17 [12.95]	52.17 [20.10]	1982.08 [1978.04,1987.11]	5.04E-010	4.70E-005

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Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
FSPCOM	34.67 [0.28]	60.65 [0.70]	45.96 [6.06]	71.20 [5.13]	54.91 [23.27]	1974.06 [1966.04,1980.12]	2.62E-008	4.10E-005
FSPIN	35.21 [0.28]	61.86 [0.70]	46.30 [6.22]	73.03 [5.27]	57.74 [24.05]	1974.06 [1966.09,1980.05]	3.94E-006	3.12E-005
FSPCAP	41.56 [0.31]	70.70 [0.77]	51.55 [7.38]	84.46 [6.25]	63.84 [26.41]	1974.06 [1966.11,1979.04]	6.87E-013	1.48E-005
FSPTR	51.97 [0.38]	88.74 [0.98]	92.56 [6.99]	63.34 [18.06]	-31.56 [20.18]	1990.09 [1983.05,1999.12]	1.42E-029	4.74E-010
FSPUT	34.81 [0.27]	57.14 [0.67]	66.66 [4.65]	42.13 [5.84]	-36.79 [9.82]	1980.05 [1976.01,1989.08]	3.57E-008	0.00158
FSPFI	52.68 [0.39]	97.08 [0.99]	83.53 [7.43]	140.22 [13.26]	67.87 [21.79]	1982.08 [1979.04,1985.03]	1.57E-010	3.23E-005

Dividends and volume

FSDXP	36.70 [0.29]	65.01 [0.73]	39.63 [9.47]	71.72 [4.87]	80.98 [44.97]	1970.04 [1963.06,1973.06]	3.87E-006	4.88E-005
FSPXE	43.47 [0.31]	66.02 [0.78]	51.59 [7.63]	76.37 [6.47]	48.04 [25.23]	1974.06 [1960.11,1984.09]	0.00563	0.000261
FSNVV3	36.85 [0.41]	46.09 [1.11]	77.73 [10.19]	21.47 [8.99]	-72.38 [12.12]	1982.01 [1981.06,1988.07]	3.62E-007	0.433

Interest rates

FYFF	379.50 [1.34]	1137.33 [3.33]	611.64 [145.43]	1450.24 [112.20]	137.11 [59.29]	1974.03 [1968.10,1974.11]	0.000127	0.000341
FYCP	393.50 [1.32]	1018.21 [3.17]	368.47 [135.22]	1357.84 [97.76]	268.51 [137.81]	1974.01 [1970.12,1974.05]	0.00119	0.00842
FYGM3	334.86 [1.19]	952.79 [2.96]	464.34 [104.66]	1325.55 [91.43]	185.47 [67.29]	1974.07 [1971.06,1974.12]	0.00273	0.00747
FYGM6	343.91 [1.14]	903.29 [2.83]	451.42 [95.55]	1248.13 [83.47]	176.49 [61.37]	1974.07 [1971.08,1975.02]	0.00325	0.00953
FYGT1	382.16 [1.15]	939.12 [2.86]	566.50 [86.14]	1398.69 [95.66]	146.90 [41.16]	1975.03 [1972.05,1975.10]	0.0501	0.0111
FYGT5	324.67 [0.95]	641.31 [2.37]	387.01 [59.28]	954.95 [65.84]	146.75 [41.45]	1975.03 [1972.05,1975.11]	0.0569	0.0207
FYGT10	275.03 [0.88]	517.81 [2.19]	271.40 [49.83]	821.71 [55.34]	202.76 [59.21]	1975.03 [1973.01,1975.09]	0.0166	0.0382
FYAAAC	203.78 [0.79]	403.42 [1.96]	173.58 [39.39]	686.88 [43.74]	295.72 [93.27]	1975.03 [1973.07,1975.06]	0.0126	0.0578
FYBAAC	200.05 [0.74]	336.62 [1.83]	176.65 [35.14]	533.91 [39.03]	202.23 [64.06]	1975.03 [1972.08,1975.09]	0.0105	0.0626
FWAFIT	322.31 [1.27]	540.06 [2.70]	619.25 [52.22]	183.72 [110.79]	-70.33 [18.06]	1982.11 [1982.03,1986.05]	9.10E-010	0.00379
FYFHA	265.94 [0.94]	526.19 [2.32]	254.44 [56.33]	861.34 [62.55]	238.53 [78.87]	1975.03 [1972.10,1975.07]	0.0171	0.0639

Exchange rates

EXRUS	19.88 [0.25]	26.46 [0.71]	24.82 [2.88]	77.17 [16.02]	210.86 [73.91]	1991.02 [1990.07,1991.10]	3.95E-131	0.00934
EXRGER	31.49 [0.31]	33.97 [0.86]	30.72 [4.14]	134.67 [23.05]	338.41 [95.51]	1991.02 [1990.10,1991.06]	1.81E-151	0.580
EXRSW	34.69 [0.33]	41.89 [0.94]	38.72 [4.98]	140.14 [27.75]	261.96 [85.47]	1991.02 [1990.09,1991.09]	2.18E-054	0.245
EXRJAN	32.06 [0.32]	42.72 [0.93]	41.37 [4.93]	84.81 [27.47]	105.04 [70.77]	1991.02 [1988.04,1993.05]	3.00E-032	0.00779
EXRUK	29.37 [0.31]	29.89 [0.88]	27.09 [4.38]	116.73 [24.40]	330.91 [113.90]	1991.02 [1990.07,1991.07]	6.67E-161	0.915
EXRCAN	12.63 [0.19]	12.64 [0.54]	14.81 [1.82]	3.24 [3.79]	-78.09 [25.74]	1990.09 [1986.10,1994.08]	1.67E-016	0.997

Producer prices

PWFSA	4.81 [0.11]	7.95 [0.27]	9.42 [0.74]	5.33 [0.99]	-43.45 [11.37]	1980.07 [1976.05,1989.03]	0.759	0.0644
PWFCSA	5.74 [0.12]	8.71 [0.30]	8.06 [0.76]	13.54 [2.08]	68.05 [30.29]	1982.11 [1979.04,1989.08]	0.120	0.0838
PWIMSA	5.24 [0.12]	10.08 [0.31]	13.72 [0.98]	5.31 [1.12]	-61.28 [8.65]	1980.02 [1979.03,1984.02]	0.293	0.142
PWCMSA	20.61 [0.25]	33.62 [0.61]	25.72 [3.05]	91.88 [8.29]	257.25 [53.29]	1982.11 [1982.03,1983.07]	3.95E-010	0.172
PWFXSA	4.92 [0.13]	8.34 [0.30]	7.53 [0.73]	13.31 [1.80]	76.80 [29.42]	1982.11 [1980.04,1987.03]	0.147	0.0621
PW160A	18.99 [0.24]	23.42 [0.69]	36.94 [4.11]	14.17 [3.40]	-61.65 [10.14]	1981.12 [1980.03,1986.04]	5.87E-010	0.331
PW150A	19.07 [0.25]	24.51 [0.71]	35.36 [4.23]	16.06 [3.73]	-54.58 [11.87]	1982.01 [1979.11,1990.03]	7.42E-025	0.0813
PW561	47.63 [0.42]	58.32 [1.05]	26.08 [8.65]	296.14 [23.49]	1035.67 [387.40]	1982.11 [1982.03,1982.12]	3.79E-031	0.709
PWCM	6.06 [0.12]	7.94 [0.30]	10.73 [0.88]	2.96 [1.18]	-72.40 [11.27]	1980.07 [1979.07,1984.09]	0.0132	0.360

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Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
PWXFA	5.08 [0.13]	10.02 [0.31]	13.22 [1.02]	6.94 [1.00]	-47.49 [8.61]	1980.02 [1977.10,1984.11]	0.0263	0.0650
PSM99Q	17.33 [0.19]	25.81 [0.47]	17.41 [3.24]	29.64 [2.19]	70.18 [34.09]	1970.11 [1962.03,1973.11]	0.0332	0.0132
PSCCOM	21.52 [0.22]	26.29 [0.55]	11.95 [4.38]	32.83 [2.96]	174.65 [103.63]	1970.11 [1965.02,1972.02]	4.17E-005	0.331
PSCFOO	31.29 [0.28]	37.30 [0.69]	13.49 [6.92]	47.44 [4.52]	251.77 [183.68]	1970.10 [1965.05,1971.08]	0.0223	0.504
PSCMAT	23.04 [0.22]	30.91 [0.54]	16.56 [4.21]	37.46 [2.84]	126.18 [59.99]	1970.11 [1966.01,1973.01]	0.00123	0.108
PZFR	21.41 [0.27]	23.16 [0.78]	38.68 [7.31]	19.29 [3.66]	-50.14 [13.35]	1980.07 [1976.03,1988.08]	0.00137	0.637
PCGOLD	47.09 [0.47]	80.43 [1.37]	97.47 [11.51]	24.46 [20.87]	-74.91 [21.61]	1990.08 [1989.05,1995.11]	3.53E-007	0.0204

Consumer prices

PUNEW	2.98 [0.08]	4.48 [0.20]	1.75 [0.58]	5.73 [0.39]	228.21 [111.79]	1970.11 [1967.12,1971.06]	0.000293	0.0703
PU81	4.34 [0.12]	5.37 [0.30]	7.88 [0.94]	2.95 [0.93]	-62.52 [12.60]	1980.02 [1979.04,1990.05]	0.000249	0.341
PUH	2.67 [0.10]	5.51 [0.23]	3.38 [0.75]	6.34 [0.47]	87.88 [43.71]	1974.04 [1970.03,1979.09]	3.55E-005	0.00167
PU83	4.14 [0.10]	3.51 [0.24]	2.44 [0.78]	4.07 [0.56]	66.62 [57.92]	1974.01 [1960.02,1981.12]	1.52E-009	0.354
PU84	6.32 [0.12]	9.15 [0.31]	7.91 [0.81]	18.29 [2.21]	131.26 [36.71]	1982.11 [1980.11,1984.05]	1.44E-018	0.0431
PU85	3.10 [0.08]	4.13 [0.19]	2.06 [0.49]	5.29 [0.36]	157.22 [63.28]	1974.02 [1971.09,1976.12]	0.000342	0.165
PUC	3.84 [0.09]	5.48 [0.24]	3.57 [0.80]	6.35 [0.54]	77.57 [42.63]	1970.11 [1960.07,1974.06]	0.00468	0.0336
PUCD	3.53 [0.09]	5.70 [0.22]	6.37 [0.44]	2.95 [0.89]	-53.69 [14.40]	1982.06 [1980.12,1988.10]	0.000267	0.0405
PUS	3.28 [0.08]	5.10 [0.21]	2.71 [0.56]	6.62 [0.44]	144.18 [52.92]	1974.04 [1970.06,1974.09]	0.0712	0.0684
PUXF	3.07 [0.08]	5.01 [0.20]	2.34 [0.58]	6.31 [0.40]	169.41 [68.63]	1973.12 [1970.08,1974.05]	0.00108	0.0256
PUXHS	3.27 [0.08]	4.41 [0.21]	2.23 [0.62]	5.40 [0.42]	142.20 [69.78]	1970.11 [1965.08,1971.06]	0.0209	0.166
PUXM	3.24 [0.08]	4.62 [0.21]	2.09 [0.59]	5.86 [0.41]	180.82 [81.51]	1973.12 [1970.07,1975.02]	0.000378	0.0807
GMDC	2.40 [0.07]	3.58 [0.18]	0.98 [0.45]	4.77 [0.30]	384.84 [222.72]	1970.11 [1969.01,1971.05]	0.000785	0.162
GMDCD	3.09 [0.09]	5.26 [0.22]	6.43 [0.48]	3.28 [0.62]	-48.90 [10.43]	1980.06 [1978.03,1987.04]	0.317	0.0422
GMDCN	3.72 [0.10]	5.40 [0.24]	3.45 [0.81]	6.30 [0.55]	82.42 [45.62]	1970.11 [1960.09,1973.11]	0.345	0.0847
GMDCS	2.12 [0.07]	2.98 [0.17]	0.92 [0.40]	3.91 [0.27]	325.55 [185.85]	1970.11 [1968.07,1971.07]	2.76E-005	0.138

Miscellaneous

PMI	2757.30 [2.45]	3381.23 [6.07]	4173.66 [354.46]	1519.02 [543.38]	-63.60 [13.38]	1981.11 [1979.01,1986.09]	0.000594	0.272
PMP	4000.86 [3.01]	4471.33 [7.47]	5278.84 [541.76]	2573.69 [830.50]	-51.25 [16.51]	1981.11 [1974.12,1992.02]	6.07E-005	0.437
PMNO	4317.40 [3.11]	4619.97 [7.72]	5553.83 [570.67]	2260.74 [907.05]	-59.29 [16.86]	1981.12 [1977.11,1990.11]	0.00436	0.680
PMDEL	3475.54 [3.09]	5389.73 [7.66]	6768.90 [568.23]	2368.70 [840.99]	-65.01 [12.77]	1981.10 [1980.12,1987.10]	0.000177	0.0742
PMNV	3720.26 [2.82]	4055.20 [6.98]	4798.16 [466.91]	2178.24 [742.13]	-54.60 [16.09]	1981.12 [1977.08,1991.05]	0.000369	0.528
PMEMP	3101.73 [2.57]	3645.26 [6.37]	4054.28 [404.56]	2808.63 [578.60]	-30.72 [15.86]	1981.09 [1967.08,1999.12]	0.170	0.151
PMCP	4564.44 [3.25]	5686.38 [8.07]	5038.87 [555.14]	11236.52 [1625.29]	123.00 [40.55]	1990.08 [1989.04,1993.04]	6.60E-006	0.167
HHSNTN	3763.40 [3.03]	4841.70 [7.51]	4412.74 [436.41]	33153.12 [3545.45]	651.30 [109.44]	1991.02 [1990.11,1991.03]	4.27E-318	0.255
F6EDM	102.54 [0.50]	90.41 [1.27]	88.27 [12.25]	210.31 [91.69]	138.26 [109.01]	1991.02 [1989.10,1994.06]	8.16E-062	0.151
FTMC6	117.89 [0.55]	149.66 [1.34]	48.88 [28.90]	176.53 [14.92]	261.12 [215.66]	1973.12 [1970.03,1974.12]	4.26E-016	0.126
FTMM6	77.54 [0.46]	94.21 [1.15]	73.18 [13.05]	123.13 [15.30]	68.26 [36.57]	1980.07 [1971.09,1993.06]	0.0814	0.308

Results for SupW tests for structural change in unconditional volatility during recessions for individual series, when allowing for a single structural change in the unconditional mean. The columns headed σ_E and σ_0 contain estimates of the unconditional standard deviation during expansions and recessions under the null hypothesis, respectively. Columns headed σ_1 and σ_2 contain estimates of the unconditional standard deviation during recessions before and after the break, respectively. The column headed $\Delta\sigma$ contains the percent change in standard deviation. The estimated volatility break date is given in the column headed τ_v , with the 90% confidence interval given in brackets. The column headed p-value_v contains the asymptotic p-value of the corresponding SupW test. The column headed p-value_{nl} contains the asymptotic p-value of the Wald test for nonlinearity in unconditional volatility. Figures in brackets below parameter estimates are standard errors.

Table A.9: Tests for structural change in expansion volatility

Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{pl}
Production								
IP	10.40 [0.32]	7.27 [0.13]	8.39 [0.43]	5.39 [0.55]	-35.83 [7.35]	1986.06 [1984.11,1991.10]	6.44E-005	0.0699
IPP	9.80 [0.31]	7.64 [0.13]	8.13 [0.36]	5.84 [0.69]	-28.15 [9.07]	1992.07 [1990.03,1999.12]	0.0199	0.159
IPF	10.71 [0.33]	8.27 [0.13]	8.69 [0.40]	6.74 [0.75]	-22.48 [9.38]	1992.07 [1987.10,1999.12]	0.217	0.0744
IPC	12.25 [0.36]	9.96 [0.15]	10.66 [0.49]	7.43 [0.93]	-30.30 [9.27]	1992.07 [1990.07,1999.04]	0.0183	0.121
IPCD	35.29 [0.62]	24.45 [0.25]	23.59 [1.52]	26.52 [2.37]	12.43 [12.40]	1989.04 [1960.02,1999.12]	1.00	0.000191
IPCN	8.66 [0.32]	8.82 [0.13]	9.31 [0.38]	7.32 [0.66]	-21.36 [7.83]	1991.07 [1986.11,1999.12]	0.0129	0.843
IPE	15.55 [0.40]	12.17 [0.16]	13.08 [0.59]	9.00 [1.09]	-31.19 [8.91]	1992.04 [1989.06,1998.01]	0.00735	0.103
IPI	12.66 [0.35]	9.49 [0.14]	10.36 [0.45]	6.41 [0.86]	-38.10 [8.70]	1992.06 [1991.06,1996.06]	3.60E-006	0.0164
IPM	13.70 [0.38]	9.78 [0.15]	11.87 [0.58]	6.39 [0.74]	-46.17 [6.77]	1986.03 [1985.08,1989.05]	1.99E-009	0.0689
IPMD	20.77 [0.46]	13.71 [0.19]	17.03 [0.92]	9.54 [1.03]	-43.97 [6.79]	1984.01 [1983.05,1988.03]	2.62E-005	0.0123
IPMND	18.26 [0.41]	11.46 [0.16]	12.28 [0.64]	9.24 [1.06]	-24.80 [9.45]	1990.01 [1985.08,1999.12]	0.0817	0.0140
IPMFG	11.61 [0.34]	7.95 [0.14]	8.74 [0.43]	5.35 [0.78]	-38.81 [9.43]	1991.12 [1990.11,1996.10]	0.000374	0.0513
IPD	15.86 [0.40]	10.47 [0.16]	12.17 [0.70]	8.33 [0.79]	-31.53 [7.59]	1984.01 [1980.12,1991.11]	0.0154	0.00563
IPN	10.35 [0.32]	7.79 [0.13]	8.47 [0.40]	5.82 [0.67]	-31.27 [8.55]	1990.06 [1989.01,1997.02]	2.05E-005	0.0964
IPMIN	14.28 [0.43]	13.09 [0.17]	14.44 [0.76]	10.69 [1.01]	-25.99 [8.02]	1986.11 [1982.09,1997.04]	0.0182	0.630
IPUT	16.18 [0.52]	18.81 [0.21]	13.45 [1.20]	24.27 [1.21]	80.37 [18.40]	1980.12 [1977.07,1981.08]	1.00E-010	0.285
IPX	839.85 [3.13]	571.98 [1.31]	700.43 [45.48]	469.07 [40.70]	-33.03 [7.26]	1984.03 [1982.06,1991.01]	0.00232	0.0818
IPXMCA	907.88 [3.07]	655.27 [1.24]	768.39 [41.11]	513.72 [45.99]	-33.14 [6.97]	1984.01 [1982.04,1990.08]	0.00268	0.0750
IPXDCA	1248.80 [3.77]	795.99 [1.58]	949.87 [66.93]	675.75 [59.17]	-28.86 [8.00]	1984.01 [1980.06,1993.06]	0.0384	0.00475
IPXNCA	857.49 [3.15]	646.19 [1.32]	735.69 [37.74]	472.84 [52.53]	-35.73 [7.86]	1990.01 [1988.12,1994.09]	5.48E-007	0.101
IPXMIN	1484.20 [4.42]	1149.44 [1.85]	1335.07 [83.67]	942.10 [88.42]	-29.43 [7.96]	1986.06 [1983.10,1994.12]	0.00833	0.141
IPXUT	1551.79 [5.36]	1796.06 [2.24]	1337.12 [145.00]	2070.52 [112.13]	54.85 [18.77]	1980.12 [1975.08,1982.05]	0.00140	0.232
GMPYQ	5.14 [0.25]	4.18 [0.10]	4.36 [0.23]	3.30 [0.49]	-24.31 [11.88]	1993.12 [1988.11,1999.12]	0.437	0.122
GMYPXQ	5.01 [0.23]	4.07 [0.09]	3.37 [0.30]	4.38 [0.20]	30.17 [13.01]	1972.05 [1962.05,1977.08]	0.0587	0.0269
(Un)employment								
LHEL	2317.78 [5.45]	2417.58 [2.20]	1889.98 [116.44]	3339.12 [153.89]	76.68 [13.59]	1986.10 [1984.09,1987.09]	9.43E-009	0.754
LHELX	55.78 [0.80]	46.22 [0.32]	58.58 [3.50]	39.51 [2.58]	-32.55 [5.97]	1973.11 [1971.12,1980.07]	0.159	0.250
LHEM	3.42 [0.22]	3.22 [0.09]	4.55 [0.33]	2.87 [0.17]	-36.97 [5.82]	1968.02 [1966.12,1974.05]	9.83E-006	0.650
LHNAG	3.39 [0.20]	3.01 [0.08]	3.25 [0.15]	2.22 [0.27]	-31.50 [8.87]	1992.02 [1990.10,1998.05]	0.000163	0.403
LHUR	227.96 [1.52]	184.42 [0.61]	243.17 [19.51]	174.21 [8.14]	-28.36 [6.65]	1965.12 [1962.07,1970.10]	0.0379	0.279
LHU680	508.38 [2.69]	554.89 [1.08]	732.28 [60.42]	522.86 [25.67]	-28.60 [6.86]	1966.02 [1963.03,1973.09]	0.526	0.570
LHU5	54.62 [0.87]	58.92 [0.35]	67.94 [3.57]	50.49 [3.45]	-25.68 [6.40]	1979.09 [1975.06,1988.01]	0.110	0.622
LHU14	55.30 [0.87]	61.36 [0.35]	76.93 [4.79]	55.82 [2.85]	-27.43 [5.84]	1969.11 [1967.01,1977.04]	0.0681	0.478
LHU15	65.18 [0.86]	58.00 [0.35]	75.75 [4.63]	51.53 [2.80]	-31.97 [5.56]	1970.12 [1968.09,1975.10]	0.00595	0.373
LHU26	84.12 [1.04]	92.09 [0.42]	116.87 [6.77]	82.84 [4.13]	-29.12 [5.42]	1971.02 [1968.07,1976.03]	0.00191	0.464
LHU27	80.18 [1.02]	80.67 [0.41]	110.58 [5.38]	63.00 [4.13]	-43.03 [4.65]	1975.11 [1975.01,1978.05]	1.00E-005	0.964
LHCH	184.87 [1.85]	255.95 [0.81]	234.74 [13.23]	357.84 [29.00]	52.44 [15.05]	1989.05 [1985.04,1991.07]	0.0436	3.34E-005

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Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
LPNAG	2.56 [0.16]	1.88 [0.06]	2.30 [0.11]	1.35 [0.12]	-41.43 [5.93]	1984.02 [1982.12,1987.02]	1.37E-008	0.162
LP	3.11 [0.17]	2.14 [0.07]	2.67 [0.13]	1.47 [0.14]	-44.95 [6.04]	1984.02 [1983.04,1987.01]	9.64E-011	0.0949
LPGD	6.19 [0.24]	3.80 [0.10]	4.65 [0.24]	2.72 [0.27]	-41.48 [6.59]	1984.02 [1983.04,1988.04]	5.64E-009	0.0109
LPMI	15.34 [0.40]	9.38 [0.16]	6.23 [1.00]	10.61 [0.63]	70.39 [29.11]	1971.06 [1965.07,1973.05]	0.00587	0.0517
LPCC	11.62 [0.43]	10.04 [0.17]	17.49 [1.28]	8.05 [0.66]	-53.96 [5.07]	1968.02 [1967.08,1971.10]	1.28E-007	0.315
LPED	6.43 [0.24]	3.58 [0.10]	4.22 [0.23]	2.50 [0.30]	-40.65 [7.73]	1986.07 [1985.08,1991.07]	0.00589	0.0118
LPEN	8.35 [0.29]	4.91 [0.12]	5.51 [0.31]	2.86 [0.57]	-48.21 [10.79]	1992.03 [1991.07,1996.05]	0.00295	0.0227
LPSP	4.75 [0.20]	2.72 [0.08]	3.57 [0.21]	2.13 [0.17]	-40.40 [5.92]	1977.04 [1976.05,1982.02]	0.000792	0.0177
LPTU	1.99 [0.14]	1.59 [0.06]	1.74 [0.07]	0.97 [0.14]	-44.18 [8.47]	1993.03 [1992.07,1995.10]	3.28E-006	0.0547
LPT	3.93 [0.30]	4.54 [0.12]	5.79 [0.41]	3.40 [0.39]	-41.17 [8.01]	1979.06 [1976.02,1985.02]	0.0136	0.450
LPFR	3.06 [0.19]	2.49 [0.08]	3.30 [0.25]	2.27 [0.13]	-31.40 [6.54]	1968.05 [1966.09,1978.10]	1.38E-006	0.174
LPS	1.88 [0.16]	2.15 [0.06]	1.13 [0.21]	2.33 [0.09]	105.18 [37.91]	1966.01 [1964.03,1966.05]	4.69E-006	0.297
LPGOV	2.25 [0.16]	1.98 [0.06]	2.35 [0.12]	1.66 [0.11]	-29.59 [5.86]	1979.03 [1977.04,1985.10]	0.000649	0.312
LW	4.34 [0.21]	2.55 [0.08]	2.79 [0.17]	1.77 [0.30]	-36.71 [11.23]	1991.09 [1991.04,1999.12]	0.00368	0.00145
LPHRM	185.44 [1.55]	114.03 [0.61]	131.77 [10.00]	95.89 [10.11]	-27.23 [9.45]	1984.05 [1978.03,1998.09]	0.0964	0.0192
LPMOSA	326.53 [2.06]	232.25 [0.83]	289.08 [20.10]	181.19 [19.06]	-37.32 [7.90]	1979.05 [1975.10,1986.02]	5.70E-005	0.127
	164.37 [1.52]	132.06 [0.61]	152.59 [10.94]	113.61 [10.37]	-25.55 [8.64]	1979.05 [1974.09,1998.02]	0.236	0.183

Wages and salaries

LEH	3.82 [0.21]	3.22 [0.08]	3.84 [0.17]	2.23 [0.21]	-42.03 [6.10]	1987.09 [1987.03,1990.06]	8.28E-010	0.167
LEHCC	8.01 [0.31]	6.06 [0.12]	8.45 [0.59]	5.19 [0.36]	-38.61 [5.99]	1971.01 [1969.01,1975.05]	0.00116	0.0734
LEHM	5.06 [0.23]	3.67 [0.09]	4.33 [0.25]	2.96 [0.26]	-31.77 [7.12]	1981.05 [1978.07,1988.11]	0.0104	0.00941
LEHTU	4.73 [0.29]	4.95 [0.11]	5.96 [0.34]	3.95 [0.34]	-33.83 [6.81]	1984.02 [1983.03,1990.08]	0.000136	0.735
LEHTT	3.92 [0.22]	3.24 [0.09]	3.81 [0.19]	2.35 [0.23]	-38.21 [6.87]	1987.06 [1986.04,1991.04]	2.44E-007	0.104
LEHFR	7.26 [0.31]	5.70 [0.12]	7.26 [0.32]	2.48 [0.46]	-65.76 [6.45]	1989.06 [1989.04,1990.09]	3.78E-016	0.148
LEHS	5.11 [0.24]	3.82 [0.10]	4.53 [0.21]	2.47 [0.29]	-45.40 [6.99]	1988.11 [1988.07,1991.10]	4.61E-009	0.00357

Construction

HSFR	135.78 [1.09]	85.91 [0.44]	96.93 [5.05]	70.07 [6.05]	-27.71 [7.29]	1985.03 [1981.06,1993.06]	0.00279	5.31E-006
HSNE	299.16 [1.66]	209.32 [0.67]	226.19 [12.12]	187.58 [13.76]	-17.07 [7.53]	1984.04 [1976.08,1999.12]	0.500	0.000457
HSMW	209.29 [1.57]	177.59 [0.63]	190.94 [9.40]	140.94 [15.58]	-26.19 [8.93]	1990.02 [1984.03,1999.01]	0.0198	0.255
HSSOU	160.13 [1.22]	105.91 [0.49]	113.09 [6.48]	96.67 [7.36]	-14.51 [8.15]	1984.04 [1966.07,1999.12]	0.486	0.000632
HSWST	175.47 [1.31]	139.16 [0.53]	135.61 [6.74]	147.69 [10.46]	8.91 [9.42]	1989.03 [1960.02,1999.12]	0.982	0.0278
HSBR	98.89 [0.98]	64.37 [0.39]	71.99 [3.61]	42.64 [6.09]	-40.77 [8.97]	1990.05 [1989.09,1995.01]	4.56E-006	0.0206
HSBNE	153.28 [1.48]	131.10 [0.56]	150.69 [8.34]	106.42 [9.36]	-29.38 [7.34]	1984.03 [1981.01,1992.04]	0.0381	0.347
HSBMW	157.54 [1.44]	110.45 [0.54]	124.71 [6.79]	70.22 [11.41]	-43.69 [9.65]	1990.05 [1989.07,1995.01]	2.51E-007	0.0939
HSBSOU	113.94 [1.14]	82.30 [0.43]	87.36 [4.35]	68.55 [7.16]	-21.53 [9.08]	1990.02 [1986.05,1999.12]	0.192	0.00420
HSBWST	140.70 [1.28]	96.03 [0.48]	101.85 [5.81]	85.20 [7.92]	-16.35 [9.13]	1987.05 [1977.06,1999.12]	0.494	0.0285
HNS	123.79 [1.09]	79.79 [0.42]	81.90 [3.83]	69.94 [8.27]	-14.61 [10.86]	1994.06 [1987.04,1999.12]	0.298	0.0124
HNSNE	247.45 [2.16]	209.74 [0.88]	165.13 [21.97]	230.57 [15.01]	39.63 [20.68]	1984.02 [1976.07,1990.12]	0.0266	0.566
HNSMW	227.77 [1.79]	149.34 [0.73]	100.84 [24.82]	155.94 [9.16]	54.64 [39.13]	1977.11 [1974.02,1981.05]	0.00502	0.0226

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Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
HNSSOU	164.53 [1.48]	113.44 [0.60]	136.43 [9.74]	100.96 [7.18]	-26.00 [7.46]	1984.11 [1981.03,1992.06]	0.0968	0.0107
HNSWST	214.21 [1.67]	139.09 [0.68]	127.32 [9.38]	159.40 [12.32]	25.20 [13.37]	1991.10 [1976.07,1999.12]	0.478	0.0230
HNR	1054.50 [2.99]	518.34 [1.17]	543.80 [28.97]	399.51 [62.59]	-26.53 [12.16]	1994.06 [1990.10,1999.12]	0.183	0.00276
HMOB	83.94 [0.85]	47.43 [0.34]	59.15 [3.31]	35.82 [3.30]	-39.45 [6.52]	1980.09 [1979.04,1985.07]	5.90E-007	0.00102
CONTC	23.69 [0.52]	16.94 [0.20]	20.39 [1.11]	13.53 [1.10]	-33.64 [6.48]	1984.02 [1982.03,1989.02]	0.000292	0.0116
CONPC	22.52 [0.54]	17.40 [0.21]	23.50 [1.45]	14.38 [1.02]	-38.81 [5.77]	1977.04 [1976.02,1981.08]	0.0185	0.157
CONQC	46.45 [0.75]	34.53 [0.30]	40.45 [2.36]	28.99 [2.28]	-28.32 [7.02]	1983.09 [1979.12,1990.12]	0.0878	0.0466
CONDO9	126.56 [1.22]	110.21 [0.49]	73.64 [11.79]	117.69 [5.34]	59.83 [26.61]	1966.09 [1962.02,1968.02]	2.30E-005	0.402

Trade

MSMTQ	11.08 [0.37]	11.42 [0.15]	12.21 [0.50]	8.44 [0.97]	-30.87 [8.48]	1992.09 [1991.02,1998.01]	0.000318	0.741
MSMQ	15.75 [0.44]	15.68 [0.18]	16.38 [0.72]	12.63 [1.50]	-22.90 [9.74]	1993.07 [1989.10,1999.12]	0.0561	0.959
MSDQ	22.65 [0.54]	22.66 [0.22]	24.30 [1.07]	17.20 [1.95]	-29.24 [8.59]	1992.01 [1989.11,1998.07]	0.00366	0.994
MSNQ	13.63 [0.40]	12.71 [0.16]	13.59 [0.76]	11.89 [0.74]	-12.49 [7.31]	1979.09 [1961.03,1999.12]	0.741	0.557
WTQ	16.47 [0.45]	16.11 [0.18]	18.51 [0.82]	11.70 [1.11]	-36.78 [6.62]	1987.03 [1986.01,1991.02]	9.20E-008	0.874
WTDQ	20.13 [0.47]	17.78 [0.19]	19.04 [0.82]	12.53 [1.66]	-34.19 [9.19]	1993.04 [1991.06,1997.12]	0.00104	0.279
WTNQ	24.04 [0.54]	21.64 [0.22]	25.47 [1.31]	17.45 [1.37]	-31.50 [6.42]	1981.07 [1979.06,1987.11]	3.88E-007	0.506
RTQ	16.72 [0.44]	12.87 [0.18]	15.18 [0.78]	8.68 [1.05]	-42.84 [7.54]	1987.02 [1986.04,1991.03]	8.04E-007	0.0571
RTDQ	39.22 [0.68]	27.32 [0.28]	31.54 [1.76]	15.72 [2.92]	-50.17 [9.65]	1990.02 [1989.10,1994.01]	5.69E-007	0.0116
RTNQ	11.16 [0.36]	10.14 [0.15]	13.45 [0.58]	6.95 [0.56]	-48.33 [4.74]	1979.12 [1979.05,1981.11]	6.09E-008	0.335

Inventories

IVMTQ	5.68 [0.23]	4.09 [0.09]	4.63 [0.23]	3.38 [0.27]	-26.97 [6.78]	1984.08 [1981.07,1992.08]	0.00522	0.00358
IVMFGQ	5.82 [0.25]	4.82 [0.10]	5.34 [0.26]	3.91 [0.34]	-26.79 [7.38]	1986.09 [1983.08,1995.05]	0.0385	0.114
IVMFDQ	7.30 [0.29]	6.50 [0.12]	7.32 [0.33]	5.00 [0.44]	-31.70 [6.78]	1987.02 [1985.02,1992.04]	0.00395	0.284
IVMFNQ	6.39 [0.26]	5.46 [0.10]	6.23 [0.27]	4.07 [0.36]	-34.70 [6.42]	1986.12 [1985.05,1990.12]	1.39E-006	0.0831
IVWRQ	11.93 [0.33]	7.99 [0.13]	9.24 [0.46]	6.25 [0.54]	-32.36 [6.76]	1984.12 [1982.11,1990.09]	0.000273	0.0138
IVRRQ	9.92 [0.33]	8.33 [0.13]	9.25 [0.43]	6.44 [0.63]	-30.37 [7.52]	1988.02 [1985.01,1994.03]	9.56E-005	0.116
IVSRQ	18.03 [0.46]	16.14 [0.18]	17.28 [0.77]	11.85 [1.49]	-31.43 [9.15]	1992.09 [1991.04,1998.10]	0.00112	0.322
IVSRMQ	28.16 [0.57]	24.65 [0.23]	25.96 [1.17]	18.92 [2.43]	-27.13 [9.92]	1993.07 [1991.07,1999.12]	0.00309	0.131
IVSRWQ	21.59 [0.50]	20.75 [0.20]	14.14 [2.14]	21.89 [0.89]	54.82 [24.29]	1965.12 [1961.11,1967.09]	0.000234	0.770
IVSRRQ	26.22 [0.55]	19.55 [0.22]	20.91 [1.09]	13.92 [2.23]	-33.40 [11.22]	1993.04 [1991.12,1999.12]	0.00187	0.0874

Orders

MOCMQ	32.36 [0.59]	26.82 [0.24]	35.12 [2.33]	24.37 [1.27]	-30.61 [5.86]	1968.09 [1965.12,1973.09]	6.29E-005	0.168
MDOQ	46.96 [0.67]	36.12 [0.27]	37.99 [1.62]	28.46 [3.27]	-25.10 [9.19]	1993.03 [1990.02,1999.12]	0.00145	0.0168
MSONDQ	88.28 [1.07]	84.45 [0.43]	52.21 [8.09]	92.83 [4.13]	77.81 [28.67]	1967.12 [1964.09,1968.11]	5.61E-005	0.775
MO	27.57 [0.52]	21.78 [0.21]	22.85 [0.98]	17.12 [2.03]	-25.08 [9.46]	1993.07 [1990.04,1999.12]	0.000977	0.0569
MOWU	41.39 [0.62]	32.28 [0.25]	33.78 [1.42]	25.76 [2.96]	-23.75 [9.33]	1993.07 [1989.07,1999.12]	0.00827	0.00919
MDO	46.98 [0.67]	36.21 [0.27]	38.09 [1.63]	28.53 [3.29]	-25.08 [9.22]	1993.03 [1990.01,1999.12]	0.00152	0.0160
MDUWU	49.54 [0.69]	39.32 [0.28]	40.82 [1.75]	33.16 [3.54]	-18.76 [9.36]	1993.03 [1986.06,1999.12]	0.129	0.0109
MNO	18.48 [0.42]	13.42 [0.17]	10.59 [1.05]	14.68 [0.70]	38.65 [15.32]	1972.05 [1964.09,1976.05]	0.0127	0.0450

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Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
MNOU	23.17 [0.52]	22.22 [0.21]	23.85 [1.24]	20.49 [1.27]	-14.09 [6.96]	1981.04 [1966.07,1999.12]	0.569	0.698
MU	14.17 [0.37]	11.37 [0.15]	13.67 [0.63]	9.32 [0.60]	-31.82 [5.40]	1979.04 [1977.08,1984.01]	0.127	0.366
MDU	14.60 [0.37]	11.81 [0.15]	14.28 [0.65]	9.61 [0.61]	-32.71 [5.29]	1979.04 [1977.10,1983.08]	0.0918	0.370
MNU	26.42 [0.51]	20.20 [0.21]	22.83 [1.22]	17.68 [1.20]	-22.55 [6.69]	1979.12 [1974.12,1992.02]	0.146	0.0991
MPCON	86.96 [1.04]	84.87 [0.42]	55.31 [7.71]	92.56 [3.93]	67.33 [24.38]	1967.12 [1964.06,1968.12]	1.16E-005	0.856
MPCONQ	86.50 [1.03]	84.46 [0.42]	58.01 [7.59]	91.34 [3.87]	57.45 [21.64]	1967.12 [1963.10,1969.03]	9.67E-005	0.849
Consumption								
GMCQ	7.70 [0.29]	6.31 [0.12]	7.17 [0.33]	4.75 [0.45]	-33.72 [7.00]	1987.02 [1985.09,1992.05]	0.000153	0.0309
GMCDQ	42.65 [0.66]	29.53 [0.27]	32.60 [1.67]	21.11 [2.77]	-35.24 [9.11]	1990.02 [1988.09,1996.06]	0.0138	0.00282
GMCNQ	8.32 [0.32]	8.30 [0.13]	9.63 [0.42]	5.84 [0.57]	-39.34 [6.43]	1987.03 [1985.10,1990.04]	1.58E-007	0.978
GMCSQ	4.09 [0.23]	3.86 [0.09]	2.59 [0.30]	4.38 [0.19]	69.04 [21.00]	1971.11 [1968.03,1972.07]	3.38E-005	0.575
GMCANQ	129.98 [1.14]	79.64 [0.46]	87.12 [4.99]	59.11 [8.26]	-32.15 [10.25]	1990.02 [1987.10,1999.06]	0.0593	0.000770
Money and credit								
FM1	5.46 [0.27]	5.70 [0.11]	3.90 [0.33]	7.28 [0.31]	86.64 [17.83]	1979.03 [1976.11,1979.10]	5.68E-006	0.822
FM2	3.39 [0.23]	3.93 [0.09]	2.17 [0.33]	4.49 [0.19]	107.49 [32.66]	1969.03 [1967.02,1969.07]	1.41E-007	0.336
FM3	4.33 [0.22]	4.30 [0.09]	2.36 [0.32]	4.88 [0.17]	107.27 [29.05]	1968.10 [1967.04,1969.03]	9.93E-009	0.961
FML	4.65 [0.25]	5.33 [0.10]	4.91 [0.23]	6.62 [0.41]	34.80 [10.40]	1989.12 [1982.10,1992.11]	0.0456	0.125
FM2DQ	5.47 [0.23]	4.64 [0.09]	3.66 [0.35]	4.95 [0.19]	35.03 [13.78]	1969.02 [1962.03,1970.12]	0.0691	0.127
FMFBA	3.69 [0.20]	3.27 [0.08]	4.07 [0.32]	3.10 [0.14]	-23.68 [6.91]	1966.10 [1961.10,1975.02]	0.554	0.472
FMBASE	4.73 [0.24]	4.38 [0.10]	3.83 [0.27]	4.89 [0.26]	27.87 [11.21]	1979.09 [1967.02,1985.11]	0.133	0.501
FMRRR	9.16 [0.38]	12.10 [0.15]	10.16 [0.65]	14.05 [0.65]	38.32 [10.84]	1980.10 [1974.07,1983.04]	0.00176	0.00162
FMRNBA	24.42 [0.56]	17.50 [0.23]	12.24 [1.57]	21.30 [1.33]	74.06 [24.78]	1977.07 [1971.08,1979.02]	0.00121	0.155
FMRNBC	19.82 [0.47]	15.11 [0.20]	9.96 [1.60]	16.64 [0.87]	67.04 [28.18]	1968.01 [1963.02,1968.12]	5.85E-007	0.164
FCLS	4.51 [0.28]	4.47 [0.12]	4.22 [0.24]	5.63 [0.51]	33.46 [14.29]	1996.01 [1987.09,1999.08]	0.182	0.956
FCSGV	14.29 [0.49]	12.41 [0.20]	18.14 [1.81]	11.62 [0.67]	-35.93 [7.36]	1977.11 [1976.08,1982.04]	0.470	0.412
FCLRE	3.53 [0.30]	5.84 [0.12]	5.02 [0.36]	6.44 [0.31]	28.23 [11.14]	1986.06 [1979.09,1990.10]	0.823	0.0102
FCLIN	5.56 [0.36]	8.01 [0.15]	9.41 [0.56]	7.14 [0.44]	-24.09 [6.47]	1985.07 [1980.05,1989.08]	0.627	0.142
FCLNBF	21.39 [0.62]	20.31 [0.29]	16.27 [1.62]	24.86 [1.72]	52.79 [18.51]	1985.09 [1981.07,1987.09]	0.00720	0.800
FCLNQ	12.48 [0.37]	10.76 [0.15]	8.23 [0.86]	11.72 [0.53]	42.30 [16.17]	1971.03 [1964.10,1973.12]	0.288	0.181
FCLBMC	31771.87 [26.65]	36400.71 [10.75]	11003.68 [2962.63]	60128.45 [2863.61]	446.44 [149.41]	1979.09 [1978.07,1979.10]	7.06E-011	0.581
CCI30M	82.63 [1.21]	96.84 [0.52]	49.42 [7.61]	128.30 [6.20]	159.58 [41.89]	1973.10 [1971.12,1973.11]	3.86E-019	0.306
CCINT	3015092.81 [316.94]	2811239.44 [120.95]	691807.18 [415824.92]	3420576.22 [222961.27]	394.44 [298.94]	1979.11 [1979.10,1979.11]	4.13E-014	0.747
CCINV	1225510.62 [217.11]	1417133.46 [82.85]	365754.45 [173110.75]	1800086.08 [104476.09]	392.16 [234.68]	1981.02 [1980.08,1981.03]	1.65E-020	0.504
Stock prices								
FSNCOM	63.59 [0.71]	34.87 [0.28]	37.55 [1.98]	29.08 [2.91]	-22.56 [8.75]	1988.06 [1981.11,1999.12]	0.346	1.83E-005
FSNIN	71.06 [0.79]	36.48 [0.32]	41.27 [2.43]	28.82 [3.08]	-30.17 [8.52]	1988.06 [1985.06,1996.05]	0.0163	5.01E-007
FSNTR	91.29 [0.89]	53.61 [0.37]	58.79 [2.97]	43.29 [4.19]	-26.37 [8.04]	1989.11 [1985.04,1997.01]	0.0260	1.70E-009
FSNUT	55.56 [0.69]	34.28 [0.28]	41.45 [2.99]	32.02 [1.68]	-22.75 [6.88]	1976.01 [1972.03,1987.02]	0.0881	0.000690
FSNFI	87.87 [0.88]	48.80 [0.36]	58.06 [4.79]	45.84 [2.71]	-21.04 [8.02]	1976.02 [1967.07,1987.08]	0.364	0.000191

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Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
FSPCOM	61.50 [0.70]	34.54 [0.28]	36.32 [1.95]	30.68 [2.88]	-15.54 [9.13]	1988.06 [1972.08,1999.12]	0.843	2.41E-005
FSPIN	62.76 [0.71]	35.14 [0.29]	37.31 [1.99]	30.33 [2.97]	-18.73 [9.07]	1988.08 [1978.02,1999.12]	0.498	2.01E-005
FSPCAP	71.19 [0.77]	41.42 [0.31]	43.88 [2.34]	35.96 [3.49]	-18.05 [9.07]	1988.08 [1974.12,1999.12]	0.461	2.04E-005
FSPTR	89.33 [0.98]	52.19 [0.38]	56.83 [3.20]	44.46 [4.12]	-21.77 [8.49]	1989.11 [1983.04,1999.12]	0.165	4.43E-010
FSPUT	57.76 [0.67]	34.94 [0.27]	28.38 [3.86]	36.10 [1.62]	27.23 [18.22]	1966.01 [1960.02,1976.09]	0.812	0.00395
FSPFI	98.50 [0.99]	52.69 [0.39]	50.21 [2.86]	64.30 [6.18]	28.06 [14.31]	1995.07 [1985.10,1999.12]	0.565	5.93E-005
Dividends and volume								
FSDXP	65.62 [0.74]	36.79 [0.30]	35.57 [1.97]	42.52 [4.27]	19.52 [13.70]	1993.12 [1963.06,1999.12]	0.847	4.13E-005
FSPXE	66.39 [0.78]	43.88 [0.31]	39.95 [3.48]	45.80 [2.43]	14.65 [11.70]	1973.01 [1960.02,1999.12]	0.894	2.23E-005
FSNVV3	45.00 [1.11]	37.36 [0.41]	63.87 [4.36]	26.54 [2.79]	-58.45 [5.20]	1981.06 [1981.02,1983.03]	6.36E-009	0.528
Interest rates								
FYFF	1008.33 [3.32]	378.06 [1.34]	459.47 [44.00]	214.64 [62.34]	-53.28 [14.29]	1987.11 [1987.08,1998.02]	0.00349	0.00372
FYCP	1004.33 [3.12]	395.09 [1.30]	169.38 [63.85]	475.64 [38.15]	180.81 [108.22]	1969.04 [1964.06,1969.06]	2.34E-005	0.00895
FYGM3	916.30 [2.93]	330.97 [1.18]	121.41 [70.21]	370.94 [30.67]	205.54 [178.50]	1966.05 [1961.03,1966.09]	0.000269	0.0115
FYGM6	872.30 [2.79]	344.41 [1.13]	127.15 [63.36]	385.85 [27.67]	203.46 [152.79]	1966.05 [1962.06,1966.09]	2.03E-005	0.0141
FYGT1	891.81 [2.84]	383.96 [1.14]	186.62 [52.41]	448.90 [30.06]	140.54 [69.45]	1969.05 [1965.02,1969.10]	2.49E-008	0.0233
FYGT5	627.67 [2.36]	328.42 [0.95]	152.79 [35.36]	388.49 [20.68]	154.26 [60.38]	1969.08 [1967.02,1969.12]	4.05E-014	0.0290
FYGT10	519.15 [2.18]	278.73 [0.88]	178.95 [21.80]	371.06 [20.97]	107.35 [27.84]	1979.08 [1976.04,1980.03]	2.05E-017	0.0369
FYAAAC	410.26 [1.98]	203.11 [0.80]	110.50 [17.72]	288.81 [17.04]	161.37 [44.65]	1979.08 [1976.12,1979.12]	2.12E-015	0.0509
FYBAAC	349.17 [1.87]	196.34 [0.75]	110.43 [15.65]	275.82 [15.05]	149.77 [37.93]	1979.08 [1977.02,1979.12]	3.79E-021	0.0448
FWAFIT	493.11 [2.72]	329.19 [1.28]	482.36 [36.21]	242.35 [27.26]	-49.76 [6.79]	1983.01 [1982.07,1985.06]	0.00205	0.0188
FYFHA	509.26 [2.35]	260.18 [0.95]	127.64 [25.01]	382.81 [24.06]	199.91 [61.71]	1979.08 [1976.11,1979.11]	1.01E-020	0.0843
Exchange rates								
EXRUS	26.93 [0.72]	20.09 [0.25]	12.86 [2.19]	21.92 [1.10]	70.46 [30.22]	1979.09 [1976.11,1980.09]	0.0229	0.00672
EXRGER	34.61 [0.87]	31.46 [0.31]	22.49 [3.08]	34.22 [1.71]	52.16 [22.15]	1980.09 [1977.04,1982.11]	0.0168	0.455
EXRSW	41.89 [0.94]	35.03 [0.33]	28.22 [3.63]	37.04 [1.98]	31.28 [18.29]	1980.10 [1975.02,1988.08]	0.840	0.278
EXRJAN	41.90 [0.93]	32.36 [0.32]	30.07 [1.91]	40.62 [3.62]	35.06 [14.78]	1995.02 [1986.12,1998.12]	0.425	0.0180
EXRUK	30.36 [0.89]	29.65 [0.31]	34.79 [1.77]	17.63 [2.71]	-49.34 [8.21]	1993.04 [1992.11,1995.04]	2.06E-007	0.873
EXRCAN	12.32 [0.54]	12.83 [0.19]	11.56 [0.85]	13.86 [0.76]	19.94 [11.03]	1986.12 [1975.11,1999.05]	0.587	0.814
Producer prices								
PWFSA	8.16 [0.27]	4.84 [0.11]	5.51 [0.31]	3.70 [0.40]	-32.82 [8.20]	1986.07 [1984.01,1994.02]	0.0689	0.0148
PWFCSA	8.86 [0.30]	5.83 [0.12]	6.58 [0.37]	4.56 [0.48]	-30.72 [8.29]	1986.07 [1983.04,1995.01]	0.0434	0.0345
PWIMSA	11.63 [0.30]	5.25 [0.12]	3.58 [0.54]	6.01 [0.36]	67.84 [27.09]	1972.08 [1965.08,1973.06]	0.0395	0.0213
PWCMSA	32.80 [0.61]	20.74 [0.25]	18.17 [1.33]	32.86 [2.89]	80.83 [20.66]	1993.12 [1990.09,1995.09]	0.00552	0.207
PWFXSA	8.69 [0.31]	5.10 [0.13]	2.20 [0.77]	5.61 [0.32]	154.75 [89.77]	1973.01 [1970.08,1973.05]	0.000853	0.00535
PW160A	21.16 [0.69]	19.50 [0.24]	25.77 [1.84]	17.49 [1.04]	-32.13 [6.30]	1981.02 [1979.08,1985.07]	1.29E-007	0.759
PW150A	17.16 [0.72]	19.06 [0.25]	27.46 [1.96]	16.25 [1.13]	-40.84 [5.90]	1981.04 [1980.06,1984.06]	0.00258	0.519
PW561	84.52 [1.04]	51.86 [0.42]	23.07 [4.08]	97.67 [5.14]	323.42 [78.09]	1986.01 [1984.06,1986.02]	5.70E-011	0.208
PWCM	8.44 [0.30]	6.33 [0.12]	7.37 [0.41]	5.22 [0.42]	-29.26 [6.87]	1981.04 [1979.03,1990.03]	0.0758	0.262
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Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
PWXFA	11.39 [0.32]	5.46 [0.14]	3.21 [0.86]	5.84 [0.35]	82.17 [50.18]	1972.11 [1968.03,1974.01]	0.00305	0.00529
PSM99Q	19.55 [0.48]	17.44 [0.19]	13.11 [1.35]	19.27 [0.87]	47.01 [16.54]	1971.12 [1966.03,1973.12]	9.79E-005	0.620
PSCCOM	23.04 [0.56]	22.01 [0.22]	15.80 [1.78]	24.87 [1.21]	57.40 [19.36]	1972.08 [1967.03,1973.08]	0.000936	0.823
PSCFOO	36.18 [0.69]	31.69 [0.28]	21.62 [2.72]	36.48 [1.87]	68.72 [22.90]	1972.11 [1967.11,1973.07]	0.00309	0.542
PSCMAT	25.48 [0.54]	23.60 [0.22]	19.16 [1.67]	25.67 [1.14]	33.97 [13.12]	1972.09 [1964.08,1976.07]	0.0388	0.675
PZFR	22.62 [0.80]	23.49 [0.27]	32.90 [2.90]	21.60 [1.30]	-34.34 [7.00]	1979.08 [1978.02,1983.09]	0.0411	0.730
PCGOLD	81.38 [1.40]	48.55 [0.48]	80.66 [7.01]	37.91 [4.04]	-53.00 [6.46]	1983.03 [1982.10,1986.05]	0.0435	0.0228

Consumer prices

PUNEW	4.86 [0.21]	3.06 [0.08]	3.94 [0.19]	2.06 [0.20]	-47.86 [5.60]	1983.04 [1982.09,1985.10]	0.00827	0.00596
PU81	5.77 [0.31]	4.72 [0.13]	6.65 [0.47]	3.58 [0.36]	-46.07 [6.65]	1980.11 [1980.07,1985.12]	0.0285	0.335
PUH	6.14 [0.24]	3.39 [0.10]	4.78 [0.28]	2.47 [0.23]	-48.25 [5.60]	1982.12 [1982.09,1985.12]	0.0952	0.00118
PU83	3.55 [0.24]	4.31 [0.10]	3.17 [0.23]	6.14 [0.29]	93.78 [16.77]	1986.01 [1983.10,1986.08]	1.13E-006	0.235
PU84	9.28 [0.31]	6.19 [0.13]	5.21 [0.48]	6.99 [0.43]	34.29 [14.98]	1978.06 [1962.07,1981.12]	0.151	0.0243
PU85	3.78 [0.20]	3.22 [0.08]	4.15 [0.17]	2.16 [0.19]	-48.06 [4.96]	1983.03 [1982.11,1985.04]	1.97E-008	0.456
PUC	5.69 [0.24]	3.79 [0.10]	2.81 [0.33]	4.27 [0.23]	51.67 [19.70]	1972.12 [1965.09,1974.11]	0.0726	0.0125
PUCD	5.60 [0.23]	3.58 [0.09]	4.16 [0.21]	2.63 [0.27]	-36.79 [7.31]	1986.04 [1985.02,1991.08]	0.0816	0.0398
PUS	5.18 [0.22]	3.12 [0.09]	4.30 [0.21]	1.80 [0.22]	-58.10 [5.46]	1983.01 [1982.11,1985.01]	9.00E-005	0.0218
PUXF	5.18 [0.21]	3.06 [0.09]	3.90 [0.19]	2.10 [0.21]	-46.25 [5.99]	1983.04 [1982.07,1986.03]	0.0149	0.00158
PUXHS	4.57 [0.22]	3.22 [0.09]	3.91 [0.21]	2.44 [0.22]	-37.73 [6.44]	1983.02 [1981.06,1987.07]	0.0281	0.0371
PUXM	4.96 [0.22]	3.14 [0.09]	3.99 [0.20]	2.17 [0.22]	-45.57 [6.09]	1983.04 [1982.08,1986.07]	0.0172	0.00771
GMDC	3.85 [0.18]	2.54 [0.07]	3.11 [0.14]	1.89 [0.15]	-39.12 [5.56]	1983.04 [1982.04,1986.07]	0.0536	0.0156
GMDCD	5.14 [0.22]	3.34 [0.09]	3.76 [0.22]	2.89 [0.23]	-23.00 [7.55]	1981.07 [1975.11,1996.01]	0.492	0.0366
GMDCN	5.81 [0.24]	3.87 [0.10]	2.85 [0.32]	4.36 [0.22]	52.90 [19.07]	1972.12 [1966.03,1974.01]	0.0429	0.0231
GMDCS	3.07 [0.17]	2.39 [0.07]	2.92 [0.12]	1.80 [0.13]	-38.32 [5.20]	1983.01 [1981.10,1985.10]	0.0474	0.130

Miscellaneous

PMI	3227.47 [6.01]	2753.22 [2.42]	3208.26 [153.89]	2136.98 [179.09]	-33.39 [6.43]	1984.09 [1982.09,1989.08]	0.00247	0.330
PMP	4444.99 [7.44]	3996.58 [3.00]	4620.75 [237.53]	3159.63 [275.05]	-31.62 [6.91]	1984.08 [1982.09,1991.04]	0.00633	0.427
PMNO	4473.74 [7.72]	4310.91 [3.11]	4668.99 [257.79]	3821.11 [301.50]	-18.16 [7.88]	1984.10 [1976.03,1999.12]	0.366	0.817
PMDEL	5474.82 [7.57]	3443.03 [3.05]	4447.87 [238.50]	2068.60 [278.94]	-53.49 [6.75]	1984.10 [1984.05,1987.08]	5.69E-009	0.00918
PMNV	3966.89 [6.93]	3723.19 [2.80]	4220.50 [210.10]	3100.87 [235.03]	-26.53 [6.66]	1984.01 [1980.03,1991.09]	0.00725	0.608
PMEMP	3189.88 [6.33]	3098.86 [2.55]	3519.33 [157.55]	2236.11 [225.68]	-36.46 [7.02]	1988.01 [1986.10,1992.03]	0.000250	0.781
PMCP	5037.54 [8.01]	4543.34 [3.23]	5239.79 [315.97]	3992.22 [281.07]	-23.81 [7.06]	1978.04 [1972.11,1990.11]	0.0879	0.483
HHSNTN	4899.70 [7.52]	3753.50 [3.03]	2040.22 [262.73]	5082.77 [231.42]	149.13 [34.03]	1978.02 [1976.04,1978.05]	1.42E-013	0.247
F6EDM	89.48 [1.27]	102.46 [0.51]	141.06 [10.38]	92.20 [5.35]	-34.64 [6.12]	1972.04 [1970.12,1978.07]	0.00482	0.124
FTMC6	146.58 [1.35]	122.26 [0.55]	133.90 [6.32]	83.93 [11.47]	-37.32 [9.06]	1991.06 [1990.06,1995.06]	0.000212	0.145
FTMM6	84.90 [1.17]	78.00 [0.46]	97.20 [5.07]	49.27 [6.20]	-49.31 [6.91]	1987.03 [1986.11,1990.02]	4.41E-010	0.538

Results for SupW tests for structural change in unconditional volatility during expansions for individual series, when allowing for nonlinearity in the unconditional mean. The columns headed σ_R and σ_0 contain estimates of the unconditional standard deviation during recessions and expansions under the null hypothesis, respectively. Columns headed σ_1 and σ_2 contain estimates of the unconditional standard deviation during expansions before and after the break, respectively. The column headed $\Delta\sigma$ contains the percent change in standard deviation. The estimated volatility break date is given in the column headed τ_v , with the 90% confidence interval given in brackets. The column headed p-value_v contains the asymptotic p-value of the corresponding SupW test. The column headed p-value_{nl} contains the asymptotic p-value of the Wald test for nonlinearity in unconditional volatility. Figures in brackets below parameter estimates are standard errors.

Table A.10: Tests for structural change in recession volatility

Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
Production								
IP	7.27 [0.13]	10.40 [0.32]	12.51 [0.97]	4.21 [1.66]	-66.34 [13.56]	1982.02 [1980.04,1986.07]	4.49E-006	0.0699
IPP	7.64 [0.13]	9.80 [0.31]	11.71 [0.91]	4.18 [1.56]	-64.29 [13.65]	1982.02 [1979.10,1986.06]	1.12E-005	0.159
IPF	8.27 [0.13]	10.71 [0.33]	12.17 [1.00]	6.42 [1.72]	-47.26 [14.80]	1982.02 [1977.08,1991.05]	4.91E-010	0.0744
IPC	9.96 [0.15]	12.25 [0.36]	14.43 [1.37]	8.81 [1.72]	-38.97 [13.26]	1980.05 [1974.07,1996.11]	0.000200	0.121
IPCD	24.45 [0.25]	35.29 [0.62]	30.39 [4.59]	39.78 [4.39]	30.92 [24.48]	1974.10 [1960.02,1999.12]	0.00694	0.000191
IPCN	8.82 [0.13]	8.66 [0.32]	9.42 [0.93]	6.01 [1.73]	-36.23 [19.44]	1982.04 [1966.07,1999.12]	3.51E-010	0.843
IPE	12.17 [0.16]	15.55 [0.40]	9.96 [2.48]	17.61 [1.50]	76.78 [46.58]	1970.08 [1960.02,1975.06]	2.46E-008	0.103
IPI	9.49 [0.14]	12.66 [0.35]	9.88 [1.76]	14.02 [1.23]	41.94 [28.11]	1973.12 [1960.02,1992.02]	2.59E-006	0.0164
IPM	9.78 [0.15]	13.70 [0.38]	16.21 [1.34]	6.32 [2.30]	-61.04 [14.52]	1982.02 [1980.04,1988.06]	7.16E-006	0.0689
IPMD	13.71 [0.19]	20.77 [0.46]	24.83 [2.00]	8.84 [3.43]	-64.41 [14.13]	1982.02 [1980.10,1987.10]	1.92E-012	0.0123
IPMND	11.46 [0.16]	18.26 [0.41]	12.21 [1.97]	23.47 [1.83]	92.14 [34.49]	1974.09 [1968.10,1976.12]	0.00393	0.0140
IPMFG	7.95 [0.14]	11.61 [0.34]	13.71 [1.08]	5.45 [1.85]	-60.23 [13.88]	1982.02 [1980.02,1987.10]	2.11E-007	0.0513
IPD	10.47 [0.16]	15.86 [0.40]	18.57 [1.51]	7.88 [2.59]	-57.58 [14.35]	1982.02 [1979.05,1988.05]	1.86E-015	0.00563
IPN	7.79 [0.13]	10.35 [0.32]	11.58 [0.98]	6.73 [1.69]	-41.90 [15.38]	1982.02 [1976.09,1995.01]	0.0206	0.0964
IPMIN	13.09 [0.17]	14.28 [0.43]	6.81 [3.00]	16.82 [1.75]	146.78 [111.53]	1970.07 [1962.12,1976.08]	0.00780	0.630
IPUT	18.81 [0.21]	16.18 [0.52]	4.71 [5.16]	18.68 [2.41]	296.23 [436.58]	1970.02 [1960.03,1972.07]	3.47E-010	0.285
IPX	571.98 [1.31]	839.85 [3.13]	1118.51 [97.94]	507.59 [106.94]	-54.62 [10.35]	1980.05 [1977.12,1985.07]	2.33E-006	0.0818
IPXMCA	655.27 [1.24]	907.88 [3.07]	1047.88 [88.62]	496.12 [151.99]	-52.66 [15.05]	1982.02 [1979.03,1990.09]	4.02E-008	0.0750
IPXDCA	795.99 [1.58]	1248.80 [3.77]	1505.65 [125.83]	644.43 [193.01]	-57.20 [13.31]	1982.02 [1979.11,1987.09]	1.29E-010	0.00475
IPXNCA	646.19 [1.32]	857.49 [3.15]	1057.81 [107.86]	677.20 [102.33]	-35.98 [11.67]	1975.03 [1968.02,1987.03]	0.00772	0.101
IPXMIN	1149.44 [1.85]	1484.20 [4.42]	1805.18 [221.34]	1233.42 [195.64]	-31.67 [13.70]	1975.01 [1968.02,1999.03]	0.112	0.141
IPXUT	1796.06 [2.24]	1551.79 [5.36]	1475.13 [221.80]	2931.61 [941.02]	98.74 [70.44]	1990.12 [1986.08,1996.12]	2.97E-005	0.232
GMPYQ	4.18 [0.10]	5.14 [0.25]	5.85 [0.63]	3.77 [0.87]	-35.57 [16.33]	1981.08 [1972.11,1999.12]	0.00423	0.122
GMYPQ	4.07 [0.09]	5.01 [0.23]	5.50 [0.51]	4.08 [0.71]	-25.87 [14.59]	1981.08 [1960.02,1999.12]	0.00344	0.0269
(Un)employment								
LHEL	2417.58 [2.20]	2317.78 [5.45]	1808.83 [356.47]	2756.04 [330.79]	52.37 [35.16]	1974.09 [1960.02,1984.05]	0.0773	0.754
LHELX	46.22 [0.32]	55.78 [0.80]	84.09 [11.00]	47.61 [5.91]	-43.38 [10.21]	1970.05 [1967.01,1983.06]	8.35E-005	0.250
LHEM	3.22 [0.09]	3.42 [0.22]	5.85 [0.97]	3.00 [0.41]	-48.82 [10.99]	1965.12 [1963.07,1981.12]	1.32E-013	0.650
LHNAG	3.01 [0.08]	3.39 [0.20]	6.20 [0.83]	2.90 [0.35]	-53.20 [8.36]	1965.12 [1963.09,1971.05]	3.27E-007	0.403
LHUR	184.42 [0.61]	227.96 [1.52]	294.23 [23.57]	123.46 [29.60]	-58.04 [10.61]	1980.05 [1976.12,1984.04]	3.36E-006	0.279
LHU680	554.89 [1.08]	508.38 [2.69]	962.55 [151.59]	428.71 [63.50]	-55.46 [9.63]	1965.12 [1963.03,1973.04]	1.23E-006	0.570
LHU5	58.92 [0.35]	54.62 [0.87]	94.33 [14.57]	45.95 [6.80]	-51.29 [10.42]	1970.02 [1966.07,1978.07]	0.00141	0.622
LHU14	61.36 [0.35]	55.30 [0.87]	68.61 [7.63]	31.45 [10.22]	-54.16 [15.74]	1980.07 [1975.08,1992.04]	9.41E-005	0.478
LHU15	58.00 [0.35]	65.18 [0.86]	77.19 [6.93]	29.85 [11.88]	-61.33 [15.78]	1982.02 [1978.09,1988.05]	0.000103	0.373
LHU26	92.09 [0.42]	84.12 [1.04]	133.17 [18.06]	68.73 [10.12]	-48.39 [10.33]	1970.06 [1965.09,1978.08]	3.03E-006	0.464
LHU27	80.67 [0.41]	80.18 [1.02]	103.13 [11.07]	48.22 [13.06]	-53.25 [13.62]	1980.03 [1976.10,1991.05]	2.09E-012	0.964
LHCH	255.95 [0.81]	184.87 [1.85]	150.27 [54.28]	197.58 [32.90]	31.48 [52.30]	1970.08 [1960.02,1995.02]	0.490	3.34E-005

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<i>continued from previous page</i>								
Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
LPNAG	1.88 [0.06]	2.56 [0.16]	3.32 [0.25]	1.20 [0.34]	-64.02 [10.46]	1980.07 [1978.12,1984.07]	1.06E-006	0.162
LP	2.14 [0.07]	3.11 [0.17]	3.88 [0.30]	1.54 [0.42]	-60.35 [11.33]	1981.09 [1980.02,1986.08]	1.92E-006	0.0949
LPGD	3.80 [0.10]	6.19 [0.24]	7.10 [0.53]	3.50 [0.90]	-50.68 [13.25]	1982.02 [1980.04,1989.10]	2.35E-005	0.0109
LPMI	9.38 [0.16]	15.34 [0.40]	16.95 [1.40]	3.44 [3.81]	-79.70 [22.57]	1982.11 [1980.07,1986.06]	2.44E-005	0.0517
LPCC	10.04 [0.17]	11.62 [0.43]	13.33 [1.75]	6.58 [3.01]	-50.67 [23.48]	1982.02 [1979.03,1999.12]	0.000358	0.315
LPED	3.58 [0.10]	6.43 [0.24]	7.68 [0.55]	3.87 [0.79]	-49.61 [10.86]	1981.09 [1980.05,1988.09]	0.00443	0.0118
LPEN	4.91 [0.12]	8.35 [0.29]	3.29 [1.30]	10.20 [0.79]	210.49 [124.85]	1970.08 [1968.03,1974.12]	1.75E-005	0.0227
LPSP	2.72 [0.08]	4.75 [0.20]	5.68 [0.45]	3.61 [0.50]	-36.32 [10.13]	1975.03 [1970.07,1988.05]	0.0314	0.0177
LPTU	1.59 [0.06]	1.99 [0.14]	2.27 [0.19]	1.37 [0.28]	-39.40 [13.56]	1981.10 [1975.04,1994.07]	0.00348	0.0547
LPT	4.54 [0.12]	3.93 [0.30]	5.11 [0.97]	2.48 [1.07]	-51.41 [22.92]	1975.03 [1960.02,1999.12]	0.0251	0.450
LPFR	2.49 [0.08]	3.06 [0.19]	3.85 [0.37]	1.74 [0.47]	-54.90 [13.04]	1980.06 [1978.04,1989.11]	5.61E-007	0.174
LPFR	2.15 [0.06]	1.88 [0.16]	2.15 [0.27]	1.51 [0.31]	-30.00 [16.94]	1980.03 [1960.02,1999.12]	0.0123	0.297
LPS	1.98 [0.06]	2.25 [0.16]	1.55 [0.43]	2.45 [0.23]	58.17 [46.11]	1970.05 [1960.02,1978.10]	1.04E-007	0.312
LPGOV	2.55 [0.08]	4.34 [0.21]	4.65 [0.38]	1.13 [1.20]	-75.70 [25.91]	1990.09 [1990.04,1995.02]	6.43E-012	0.00145
LW	114.03 [0.61]	185.44 [1.55]	209.48 [21.16]	123.85 [33.88]	-40.88 [17.24]	1982.03 [1974.08,1998.07]	0.00160	0.0192
LPHRM	232.25 [0.83]	326.53 [2.06]	375.88 [39.66]	169.20 [70.81]	-54.99 [19.43]	1982.03 [1980.02,1996.07]	0.000470	0.127
LPMOSA	132.06 [0.61]	164.37 [1.52]	184.28 [21.03]	88.99 [40.92]	-51.71 [22.88]	1982.05 [1977.04,1999.12]	0.000125	0.183

Wages and salaries

LEH	3.22 [0.08]	3.82 [0.21]	2.78 [0.67]	4.18 [0.40]	50.39 [39.07]	1974.03 [1965.02,1998.06]	0.000602	0.167
LEHCC	6.06 [0.12]	8.01 [0.31]	6.43 [0.92]	11.47 [1.37]	78.40 [33.29]	1981.10 [1976.07,1990.08]	4.85E-007	0.0734
LEHM	3.67 [0.09]	5.06 [0.23]	5.75 [0.52]	3.03 [0.89]	-47.32 [16.16]	1982.02 [1978.10,1994.10]	2.95E-011	0.00941
LEHTU	4.95 [0.11]	4.73 [0.29]	2.86 [1.12]	5.52 [0.73]	93.04 [80.11]	1974.05 [1965.02,1995.09]	1.77E-005	0.735
LEHTT	3.24 [0.09]	3.92 [0.22]	4.55 [0.48]	2.85 [0.62]	-37.44 [15.17]	1981.10 [1973.10,1999.12]	0.00436	0.104
LEHFR	5.70 [0.12]	7.26 [0.31]	3.94 [1.29]	8.67 [0.84]	120.24 [75.09]	1974.05 [1967.06,1978.06]	6.15E-005	0.148
LEHS	3.82 [0.10]	5.11 [0.24]	5.85 [0.54]	3.51 [0.80]	-40.03 [14.75]	1982.01 [1977.04,1997.06]	5.85E-017	0.00357

Construction

HSFR	85.91 [0.44]	135.78 [1.09]	129.43 [10.06]	214.53 [35.43]	65.74 [30.25]	1990.10 [1988.09,1995.08]	1.54E-011	5.31E-006
HSNE	209.32 [0.67]	299.16 [1.66]	254.64 [31.20]	347.86 [32.63]	36.61 [21.08]	1975.01 [1960.07,1998.04]	0.000114	0.000457
HSMW	177.59 [0.63]	209.29 [1.57]	187.06 [20.02]	683.58 [92.46]	265.44 [63.03]	1990.12 [1990.07,1991.07]	8.24E-013	0.255
HSSOU	105.91 [0.49]	160.13 [1.22]	140.71 [13.60]	227.46 [25.33]	61.66 [23.84]	1982.04 [1976.03,1988.02]	6.15E-012	0.000632
HSWST	139.16 [0.53]	175.47 [1.31]	249.82 [33.03]	159.25 [15.43]	-36.25 [10.45]	1970.02 [1963.08,1979.08]	0.000234	0.0278
HSBR	64.37 [0.39]	98.89 [0.98]	59.39 [12.90]	120.94 [9.64]	103.63 [47.12]	1974.02 [1968.11,1978.07]	0.000831	0.0206
HSBNE	131.10 [0.56]	153.28 [1.48]	173.72 [18.92]	82.55 [35.19]	-52.48 [20.91]	1982.06 [1976.07,1996.01]	1.93E-005	0.347
HSBMW	110.45 [0.54]	157.54 [1.44]	176.41 [17.21]	66.97 [37.70]	-62.04 [21.69]	1982.09 [1976.05,1988.10]	0.00519	0.0939
HSBSOU	82.30 [0.43]	113.94 [1.14]	36.08 [37.59]	119.71 [10.23]	231.79 [346.80]	1970.03 [1965.01,1972.04]	0.000154	0.00420
HSBWST	96.03 [0.48]	140.70 [1.28]	21.36 [47.18]	149.54 [12.84]	600.21 [1547.98]	1970.03 [1966.09,1971.08]	1.95E-007	0.0285
HNS	79.79 [0.42]	123.79 [1.09]	83.82 [12.95]	157.31 [11.86]	87.68 [32.26]	1975.02 [1970.11,1978.08]	1.07E-007	0.0124
HNSNE	209.74 [0.88]	247.45 [2.16]	152.01 [46.36]	319.98 [40.42]	110.50 [69.49]	1980.06 [1974.02,1984.04]	0.00358	0.566
HNSMW	149.34 [0.73]	227.77 [1.79]	213.65 [21.86]	420.69 [80.82]	96.90 [42.86]	1990.12 [1988.11,1993.02]	2.71E-005	0.0226

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Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
HNSSOU	113.44 [0.60]	164.53 [1.48]	188.85 [17.63]	117.50 [24.51]	-37.78 [14.22]	1982.04 [1975.09,1993.01]	1.83E-005	0.0107
HNSWST	139.09 [0.68]	214.21 [1.67]	276.58 [23.44]	124.11 [28.17]	-55.13 [10.87]	1982.01 [1979.05,1985.04]	0.00211	0.0230
HNR	518.34 [1.17]	1054.50 [2.99]	665.22 [96.94]	1380.99 [88.78]	107.60 [33.07]	1975.02 [1972.04,1976.09]	0.0619	0.00276
HMOB	47.43 [0.34]	83.94 [0.85]	101.44 [7.20]	50.46 [9.96]	-50.26 [10.44]	1981.08 [1979.10,1987.09]	0.00111	0.00102
CONTC	16.94 [0.20]	23.69 [0.52]	28.64 [2.70]	17.79 [2.95]	-37.88 [11.84]	1980.05 [1975.02,1994.03]	0.00100	0.0116
CONPC	17.40 [0.21]	22.52 [0.54]	36.78 [4.89]	19.10 [2.39]	-48.06 [9.48]	1970.11 [1968.11,1981.08]	1.11E-007	0.157
CONQC	34.53 [0.30]	46.45 [0.75]	44.20 [4.28]	86.95 [18.16]	96.70 [45.28]	1990.12 [1988.12,1993.11]	6.19E-015	0.0466
CONDO9	110.21 [0.49]	126.56 [1.22]	34.76 [28.45]	146.58 [13.29]	321.75 [347.39]	1970.02 [1965.10,1972.04]	1.20E-010	0.402
Trade								
MSMTQ	11.42 [0.15]	11.08 [0.37]	11.56 [1.18]	6.21 [3.75]	-46.29 [32.89]	1990.09 [1983.10,1999.12]	3.98E-042	0.741
MSMQ	15.68 [0.18]	15.75 [0.44]	14.24 [2.33]	17.14 [2.23]	20.40 [25.19]	1974.10 [1960.02,1999.12]	0.0585	0.959
MSDQ	22.66 [0.22]	22.65 [0.54]	22.37 [2.36]	41.16 [19.17]	84.01 [87.86]	1991.02 [1987.06,1996.06]	2.39E-026	0.994
MSNQ	12.71 [0.16]	13.63 [0.40]	10.09 [2.53]	14.93 [1.53]	47.98 [40.12]	1970.08 [1960.02,1992.10]	1.48E-015	0.557
WTQ	16.11 [0.18]	16.47 [0.45]	11.91 [2.98]	18.55 [2.01]	55.79 [42.48]	1970.11 [1960.02,1992.02]	0.0168	0.874
WTDQ	17.78 [0.19]	20.13 [0.47]	22.03 [2.48]	17.78 [2.75]	-19.26 [15.43]	1975.03 [1960.02,1999.12]	0.147	0.279
WTNQ	21.64 [0.22]	24.04 [0.54]	14.83 [4.46]	27.68 [2.80]	86.61 [59.19]	1970.09 [1960.11,1982.11]	7.21E-006	0.506
RTQ	12.87 [0.18]	16.72 [0.44]	10.29 [2.90]	19.45 [1.89]	89.08 [56.33]	1970.10 [1961.08,1980.03]	0.00264	0.0571
RTDQ	27.32 [0.28]	39.22 [0.68]	29.69 [5.78]	46.49 [5.05]	56.56 [34.87]	1974.07 [1960.02,1990.03]	0.000478	0.0116
RTNQ	10.14 [0.15]	11.16 [0.36]	13.37 [1.47]	8.74 [1.53]	-34.62 [13.53]	1975.01 [1964.11,1999.12]	1.47E-012	0.335
Inventories								
IVMTQ	4.09 [0.09]	5.68 [0.23]	5.59 [0.44]	11.48 [3.55]	105.49 [65.61]	1991.02 [1990.03,1993.03]	2.56E-025	0.00358
IVMFGQ	4.82 [0.10]	5.82 [0.25]	6.18 [0.56]	3.18 [1.51]	-48.57 [24.83]	1982.11 [1975.02,1993.06]	1.28E-005	0.114
IVMFDQ	6.50 [0.12]	7.30 [0.29]	8.47 [0.89]	5.85 [0.99]	-30.94 [13.78]	1975.03 [1961.09,1999.12]	0.0300	0.284
IVMFNQ	5.46 [0.10]	6.39 [0.26]	6.67 [0.59]	4.81 [1.41]	-27.93 [22.13]	1982.09 [1961.01,1999.12]	0.000494	0.0831
IVWRQ	7.99 [0.13]	11.93 [0.33]	17.96 [2.27]	10.88 [0.95]	-39.43 [9.31]	1965.12 [1961.11,1973.03]	0.0293	0.0138
IVRRQ	8.33 [0.13]	9.92 [0.33]	10.39 [0.96]	6.48 [2.59]	-37.62 [25.62]	1982.11 [1972.03,1999.12]	1.20E-012	0.116
IVSRQ	16.14 [0.18]	18.03 [0.46]	13.00 [2.50]	22.35 [2.32]	71.93 [37.63]	1974.09 [1962.04,1981.09]	0.0586	0.322
IVSRMQ	24.65 [0.23]	28.16 [0.57]	23.21 [3.79]	32.69 [3.62]	40.82 [27.77]	1974.10 [1960.02,1995.11]	1.32E-007	0.131
IVSRWQ	20.75 [0.20]	21.59 [0.50]	16.11 [2.58]	30.79 [3.34]	91.14 [36.98]	1980.06 [1974.03,1986.03]	1.50E-005	0.770
IVSRRQ	19.55 [0.22]	26.22 [0.55]	15.41 [3.74]	33.98 [3.17]	120.46 [57.36]	1974.06 [1967.07,1977.04]	3.72E-012	0.0874
Orders								
MOCMQ	26.82 [0.24]	32.36 [0.59]	21.12 [6.12]	35.32 [3.15]	67.26 [50.74]	1970.04 [1960.08,1987.06]	0.0655	0.168
MDOQ	36.12 [0.27]	46.96 [0.67]	45.38 [3.76]	66.55 [13.24]	46.67 [31.60]	1990.10 [1982.07,1999.12]	1.01E-006	0.0168
MSONDQ	84.45 [0.43]	88.28 [1.07]	74.61 [9.95]	166.19 [23.76]	122.73 [43.56]	1982.09 [1979.07,1985.11]	0.000147	0.775
MO	21.78 [0.21]	27.57 [0.52]	22.05 [3.82]	30.26 [2.67]	37.24 [26.68]	1973.12 [1960.02,1991.06]	6.17E-015	0.0569
MOWU	32.28 [0.25]	41.39 [0.62]	39.97 [3.31]	58.99 [11.66]	47.60 [31.64]	1990.10 [1982.10,1999.10]	1.00E-007	0.00919
MDO	36.21 [0.27]	46.98 [0.67]	45.34 [3.78]	67.32 [13.31]	48.47 [31.86]	1990.10 [1982.12,1999.07]	3.81E-011	0.0160
MDUWU	39.32 [0.28]	49.54 [0.69]	47.53 [4.05]	74.43 [14.27]	56.61 [32.87]	1990.10 [1984.08,1997.06]	3.43E-011	0.0109
MNO	13.42 [0.17]	18.48 [0.42]	21.57 [2.05]	15.29 [2.08]	-29.11 [11.77]	1974.12 [1960.02,1991.11]	0.00733	0.0450
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Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
MNOU	22.22 [0.21]	23.17 [0.52]	24.47 [2.29]	7.03 [8.05]	-71.25 [33.02]	1990.10 [1987.09,1996.07]	4.37E-009	0.698
MU	11.37 [0.15]	14.17 [0.37]	18.63 [1.42]	7.96 [1.67]	-57.30 [9.54]	1980.03 [1978.07,1984.12]	0.00192	0.366
MDU	11.81 [0.15]	14.60 [0.37]	19.18 [1.46]	8.22 [1.72]	-57.12 [9.55]	1980.03 [1978.07,1984.12]	0.00196	0.370
MNU	20.20 [0.21]	26.42 [0.51]	32.44 [2.70]	16.94 [3.39]	-47.78 [11.33]	1980.05 [1977.01,1988.07]	1.73E-005	0.0991
MPCON	84.87 [0.42]	86.96 [1.04]	35.44 [22.76]	96.00 [9.54]	170.85 [176.02]	1965.12 [1960.02,1968.10]	6.77E-006	0.856
MPCONQ	84.46 [0.42]	86.50 [1.03]	78.83 [9.19]	143.08 [24.97]	81.50 [38.10]	1982.11 [1978.04,1989.04]	3.45E-005	0.849

Consumption

GMCQ	6.31 [0.12]	7.70 [0.29]	7.57 [0.68]	16.37 [5.53]	116.11 [75.54]	1991.02 [1990.03,1993.05]	2.90E-054	0.0309
GMCDQ	29.53 [0.27]	42.65 [0.66]	33.18 [5.43]	49.88 [4.74]	50.31 [28.44]	1974.07 [1960.02,1983.01]	1.13E-039	0.00282
GMCNQ	8.30 [0.13]	8.32 [0.32]	13.41 [2.10]	7.32 [0.93]	-45.37 [11.02]	1970.01 [1965.02,1978.11]	2.03E-012	0.978
GMCSQ	3.86 [0.09]	4.09 [0.23]	3.25 [0.61]	4.82 [0.56]	48.41 [32.73]	1974.09 [1960.02,1983.02]	3.12E-016	0.575
GMCANQ	79.64 [0.46]	129.98 [1.14]	122.46 [10.81]	290.26 [49.92]	137.02 [45.81]	1990.12 [1990.07,1992.08]	1.46E-013	0.000770

Money and credit

FM1	5.70 [0.11]	5.46 [0.27]	3.68 [0.79]	7.66 [0.88]	108.38 [50.97]	1975.03 [1965.09,1978.01]	0.149	0.822
FM2	3.93 [0.09]	3.39 [0.23]	3.69 [0.47]	2.37 [0.88]	-35.68 [25.25]	1982.04 [1960.02,1999.12]	5.44E-009	0.336
FM3	4.30 [0.09]	4.33 [0.22]	4.00 [0.42]	7.23 [1.23]	80.94 [36.05]	1990.08 [1983.04,1994.02]	0.000263	0.961
FML	5.33 [0.10]	4.65 [0.25]	4.56 [0.50]	7.44 [2.86]	63.06 [65.24]	1991.01 [1976.01,1997.08]	1.59E-007	0.125
FM2DQ	4.64 [0.09]	5.47 [0.23]	6.32 [0.55]	4.19 [0.66]	-33.67 [11.96]	1980.04 [1966.07,1990.10]	4.23E-005	0.127
FMFBA	3.27 [0.08]	3.69 [0.20]	6.63 [0.84]	3.17 [0.35]	-52.15 [8.03]	1965.12 [1963.07,1969.11]	7.92E-005	0.472
FMBASE	4.38 [0.10]	4.73 [0.24]	6.18 [1.15]	4.44 [0.51]	-28.21 [15.63]	1970.01 [1960.02,1990.04]	0.0289	0.501
FMRRA	12.10 [0.15]	9.16 [0.38]	8.21 [1.28]	13.11 [2.61]	59.68 [40.36]	1982.06 [1960.02,1994.07]	1.33E-009	0.00162
FMRNBA	17.50 [0.23]	24.42 [0.56]	30.06 [3.21]	14.96 [4.16]	-50.24 [14.84]	1980.06 [1967.10,1985.07]	0.00520	0.155
FMRNBC	15.11 [0.20]	19.82 [0.47]	10.98 [3.99]	22.16 [2.05]	101.82 [75.73]	1970.04 [1960.02,1972.11]	0.0129	0.164
FCLS	4.47 [0.12]	4.51 [0.28]	6.24 [0.80]	3.19 [0.70]	-48.89 [13.02]	1980.06 [1974.02,1985.09]	0.0416	0.956
FCSGV	12.41 [0.20]	14.29 [0.49]	19.05 [2.09]	8.58 [2.29]	-54.94 [12.97]	1981.11 [1978.10,1988.10]	9.60E-006	0.412
FCLRE	5.84 [0.12]	3.53 [0.30]	5.29 [0.89]	2.19 [0.77]	-58.64 [16.19]	1980.06 [1974.02,1987.09]	0.00592	0.0102
FCLIN	8.01 [0.15]	5.56 [0.36]	7.46 [1.27]	3.98 [1.16]	-46.64 [18.02]	1980.07 [1974.02,1993.06]	0.112	0.142
FCLNBF	20.31 [0.29]	21.39 [0.62]	30.39 [3.81]	14.56 [3.32]	-52.10 [12.48]	1980.06 [1976.04,1984.02]	0.0656	0.800
FCLNQ	10.76 [0.15]	12.48 [0.37]	7.53 [2.10]	14.44 [1.32]	91.81 [56.41]	1970.09 [1960.08,1974.10]	8.90E-021	0.181
FCLBMC	36400.71 [10.75]	31771.87 [26.65]	25638.89 [6021.13]	94123.89 [19198.49]	267.11 [114.19]	1990.09 [1983.12,1991.03]	5.73E-084	0.581
CCI30M	96.84 [0.52]	82.63 [1.21]	44.78 [16.86]	119.36 [16.61]	166.55 [106.98]	1974.11 [1963.09,1976.06]	0.000166	0.306
CCINT	2811239.44 [120.95]	3015092.81 [316.94]	7727082.72 [2997304.39]	2852610.40 [556585.45]	-63.08 [16.03]	1980.02 [1977.09,1981.01]	1.14E-023	0.747
CCINV	1417133.46 [82.85]	1225510.62 [217.11]	907148.77 [306251.33]	1968354.92 [467806.63]	116.98 [89.58]	1982.10 [1976.02,1986.07]	0.00134	0.504

Stock prices

FSNCOM	34.87 [0.28]	63.59 [0.71]	47.81 [6.24]	74.91 [5.28]	56.67 [23.23]	1974.06 [1967.03,1980.10]	0.000818	1.83E-005
FSNIN	36.48 [0.32]	71.06 [0.79]	52.45 [8.30]	79.65 [5.64]	51.87 [26.33]	1974.06 [1967.02,1981.07]	0.0195	5.01E-007
FSNTR	53.61 [0.37]	91.29 [0.89]	92.75 [6.00]	9.37 [44.87]	-89.90 [48.38]	1991.02 [1990.03,1992.09]	1.48E-045	1.70E-009
FSNUT	34.28 [0.28]	55.56 [0.69]	67.25 [4.79]	41.61 [5.23]	-38.12 [8.95]	1980.05 [1977.03,1987.08]	1.62E-016	0.000690
FSNFI	48.80 [0.36]	87.87 [0.88]	77.80 [6.33]	129.99 [12.95]	67.08 [21.50]	1982.08 [1979.09,1985.12]	0.0113	0.000191

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Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{n,l}
FSPCOM	34.54 [0.28]	61.50 [0.70]	45.79 [6.15]	72.79 [5.21]	58.97 [24.18]	1974.06 [1967.04,1980.07]	0.00326	2.41E-005
FSPIN	35.14 [0.29]	62.76 [0.71]	46.08 [6.30]	74.73 [5.33]	62.16 [24.99]	1974.06 [1967.09,1980.01]	0.00209	2.01E-005
FSPCAP	41.42 [0.31]	71.19 [0.77]	50.16 [7.38]	86.30 [6.25]	72.04 [28.22]	1974.06 [1968.04,1978.10]	1.75E-019	2.04E-005
FSPTR	52.19 [0.38]	89.33 [0.98]	90.97 [6.56]	15.55 [44.01]	-82.90 [48.39]	1991.02 [1989.12,1993.02]	4.52E-039	4.43E-010
FSPUT	34.94 [0.27]	57.76 [0.67]	31.61 [8.70]	63.46 [4.06]	100.75 [56.72]	1970.02 [1965.09,1973.10]	2.89E-008	0.00395
FSPFI	52.69 [0.39]	98.50 [0.99]	82.93 [7.46]	148.03 [13.31]	78.50 [22.71]	1982.08 [1980.01,1984.07]	0.000596	5.93E-005

Dividends and volume

FSDXP	36.79 [0.30]	65.62 [0.74]	45.54 [7.85]	74.79 [5.30]	64.22 [30.60]	1970.11 [1963.01,1976.02]	0.000445	4.13E-005
FSPXE	43.88 [0.31]	66.39 [0.78]	54.36 [7.63]	75.02 [6.46]	38.00 [22.72]	1974.06 [1960.02,1988.10]	3.27E-007	2.23E-005
FSNVV3	37.36 [0.41]	45.00 [1.11]	76.94 [10.25]	20.16 [9.04]	-73.79 [12.26]	1982.01 [1981.06,1988.07]	5.41E-007	0.528

Interest rates

FYFF	378.06 [1.34]	1008.33 [3.32]	457.62 [147.23]	1315.71 [109.99]	187.51 [95.57]	1974.02 [1969.01,1974.09]	0.00840	0.00372
FYCP	395.09 [1.30]	1004.33 [3.12]	364.10 [128.01]	1361.67 [95.63]	273.99 [134.08]	1974.02 [1971.04,1974.05]	0.0130	0.00895
FYGM3	330.97 [1.18]	916.30 [2.93]	531.92 [91.10]	1390.36 [101.18]	161.38 [48.64]	1975.03 [1972.03,1975.10]	0.0311	0.0115
FYGM6	344.41 [1.13]	872.30 [2.79]	518.66 [82.39]	1308.46 [91.50]	152.28 [43.79]	1975.03 [1972.06,1975.11]	0.0288	0.0141
FYGT1	383.96 [1.14]	891.81 [2.84]	519.45 [84.99]	1351.06 [94.38]	160.09 [46.27]	1975.03 [1972.06,1975.10]	0.0275	0.0233
FYGT5	328.42 [0.95]	627.67 [2.36]	366.57 [58.95]	949.69 [65.47]	159.07 [45.33]	1975.03 [1972.08,1975.11]	0.0713	0.0290
FYGT10	278.73 [0.88]	519.15 [2.18]	262.73 [50.36]	816.92 [54.27]	210.94 [63.08]	1975.02 [1973.01,1975.08]	0.0101	0.0369
FYAAAC	203.11 [0.80]	410.26 [1.98]	178.80 [40.18]	695.73 [44.62]	289.12 [90.93]	1975.03 [1973.07,1975.07]	0.00799	0.0509
FYBAAC	196.34 [0.75]	349.17 [1.87]	184.45 [36.64]	552.32 [40.69]	199.44 [63.44]	1975.03 [1972.08,1975.10]	0.000495	0.0448
FWAFIT	329.19 [1.28]	493.11 [2.72]	731.97 [78.81]	356.61 [59.58]	-51.28 [9.68]	1980.03 [1978.12,1985.05]	4.82E-008	0.0188
FYFHA	260.18 [0.95]	509.26 [2.35]	220.67 [57.76]	865.19 [64.15]	292.07 [106.66]	1975.03 [1973.01,1975.08]	0.00833	0.0843

Exchange rates

EXRUS	20.09 [0.25]	26.93 [0.72]	25.47 [2.91]	72.27 [16.21]	183.78 [71.46]	1991.02 [1990.06,1991.12]	3.70E-115	0.00672
EXRGER	31.46 [0.31]	34.61 [0.87]	31.62 [4.24]	127.44 [23.63]	303.06 [92.27]	1991.02 [1990.09,1991.07]	3.22E-147	0.455
EXRSW	35.03 [0.33]	41.89 [0.94]	38.76 [5.03]	138.68 [28.00]	257.77 [85.87]	1991.02 [1990.09,1991.09]	7.89E-052	0.278
EXRJAN	32.36 [0.32]	41.90 [0.93]	40.67 [4.99]	80.04 [27.79]	96.80 [72.48]	1991.02 [1987.09,1993.12]	7.92E-029	0.0180
EXRUK	29.65 [0.31]	30.36 [0.89]	27.77 [4.48]	110.56 [24.92]	298.13 [110.32]	1991.02 [1990.06,1991.09]	1.50E-265	0.873
EXRCAN	12.83 [0.19]	12.32 [0.54]	14.42 [1.81]	3.24 [3.77]	-77.50 [26.31]	1990.09 [1986.10,1995.01]	7.26E-018	0.814

Producer prices

PWFSA	4.84 [0.11]	8.16 [0.27]	10.08 [0.87]	6.30 [0.85]	-37.51 [10.04]	1974.11 [1968.12,1986.02]	1.05E-006	0.0148
PWFCSA	5.83 [0.12]	8.86 [0.30]	8.56 [0.74]	18.59 [4.24]	117.17 [52.94]	1991.01 [1990.05,1993.02]	9.68E-009	0.0345
PWIMSA	5.25 [0.12]	11.63 [0.30]	6.72 [1.33]	13.87 [0.90]	106.49 [42.89]	1970.11 [1966.01,1971.05]	0.000187	0.0213
PWCMSA	20.74 [0.25]	32.80 [0.61]	24.79 [3.08]	91.88 [8.37]	270.57 [57.09]	1982.11 [1982.03,1983.07]	2.45E-010	0.207
PWFXSA	5.10 [0.13]	8.69 [0.31]	8.21 [0.73]	21.77 [3.81]	165.07 [52.00]	1991.01 [1990.09,1991.12]	3.84E-029	0.00535
PW160A	19.50 [0.24]	21.16 [0.69]	41.77 [5.19]	14.29 [3.00]	-65.79 [8.33]	1980.07 [1979.02,1983.04]	0.000730	0.759
PW150A	19.06 [0.25]	17.16 [0.72]	23.21 [4.43]	12.45 [3.91]	-46.36 [19.70]	1982.01 [1975.06,1999.12]	0.000274	0.519
PW561	51.86 [0.42]	84.52 [1.04]	55.50 [8.71]	298.47 [23.64]	437.75 [94.49]	1982.11 [1982.01,1982.12]	9.78E-035	0.208
PWCM	6.33 [0.12]	8.44 [0.30]	10.46 [0.90]	4.80 [1.20]	-54.13 [12.17]	1980.07 [1978.09,1988.09]	0.195	0.262

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Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
PWXFA	5.46 [0.14]	11.39 [0.32]	10.35 [0.83]	18.80 [2.22]	81.70 [25.95]	1990.08 [1989.06,1993.04]	1.88E-009	0.00529
PSM99Q	17.44 [0.19]	19.55 [0.48]	7.97 [3.24]	24.84 [2.19]	211.91 [129.76]	1970.11 [1966.03,1972.05]	0.0127	0.620
PSCCOM	22.01 [0.22]	23.04 [0.56]	11.74 [4.48]	28.19 [3.03]	140.17 [95.17]	1970.11 [1961.04,1973.01]	0.0757	0.823
PSCFOO	31.69 [0.28]	36.18 [0.69]	19.15 [6.91]	43.96 [4.67]	129.51 [86.36]	1970.11 [1960.06,1972.07]	0.00334	0.542
PSCMAT	23.60 [0.22]	25.48 [0.54]	30.28 [2.93]	16.89 [3.92]	-44.23 [14.01]	1980.07 [1972.11,1991.09]	1.53E-005	0.675
PZFR	23.49 [0.27]	22.62 [0.80]	0.06 [19.36]	23.40 [3.59]	42023.01 [14678738.33]	1980.02 [1977.02,1988.06]	4.60E-018	0.730
PCGOLD	48.55 [0.48]	81.38 [1.40]	98.33 [12.07]	25.67 [21.88]	-73.90 [22.48]	1990.08 [1989.06,1996.08]	3.25E-007	0.0228

Consumer prices

PUNEW	3.06 [0.08]	4.86 [0.21]	3.78 [0.63]	5.36 [0.42]	41.62 [26.00]	1970.11 [1960.02,1978.07]	5.52E-005	0.00596
PU81	4.72 [0.13]	5.77 [0.31]	7.86 [1.08]	4.25 [0.93]	-45.85 [13.95]	1974.12 [1972.07,1999.12]	0.138	0.335
PUH	3.39 [0.10]	6.14 [0.24]	4.18 [0.63]	7.90 [0.59]	89.16 [31.71]	1975.03 [1971.01,1976.10]	0.00620	0.00118
PU83	4.31 [0.10]	3.55 [0.24]	2.55 [0.81]	4.08 [0.59]	59.77 [55.67]	1974.01 [1960.02,1985.12]	2.75E-017	0.235
PU84	6.19 [0.13]	9.28 [0.31]	8.57 [0.81]	24.52 [3.74]	186.22 [51.37]	1990.12 [1990.07,1991.12]	2.04E-049	0.0243
PU85	3.22 [0.08]	3.78 [0.20]	7.81 [0.84]	3.07 [0.35]	-60.73 [6.18]	1965.12 [1964.08,1968.04]	5.16E-009	0.456
PUC	3.79 [0.10]	5.69 [0.24]	5.48 [0.48]	12.30 [2.74]	124.37 [53.68]	1991.01 [1990.07,1992.12]	3.38E-021	0.0125
PUCD	3.58 [0.09]	5.60 [0.23]	8.66 [1.09]	5.06 [0.46]	-41.52 [9.05]	1965.12 [1961.01,1968.04]	0.00916	0.0398
PUS	3.12 [0.09]	5.18 [0.22]	4.08 [0.54]	6.46 [0.58]	58.18 [25.26]	1975.02 [1963.12,1979.12]	0.550	0.0218
PUXF	3.06 [0.09]	5.18 [0.21]	6.97 [0.95]	4.87 [0.40]	-30.11 [11.08]	1965.12 [1960.02,1971.08]	1.13E-008	0.00158
PUXHS	3.22 [0.09]	4.57 [0.22]	5.34 [0.49]	3.50 [0.58]	-34.46 [12.49]	1980.03 [1971.02,1996.12]	4.40E-011	0.0371
PUXM	3.14 [0.09]	4.96 [0.22]	3.55 [0.66]	5.66 [0.46]	59.46 [32.38]	1973.12 [1963.02,1982.07]	0.000769	0.00771
GMDC	2.54 [0.07]	3.85 [0.18]	4.49 [0.34]	2.96 [0.40]	-34.10 [10.31]	1980.03 [1974.01,1991.12]	5.86E-006	0.0156
GMDCD	3.34 [0.09]	5.14 [0.22]	6.33 [0.51]	3.49 [0.60]	-44.87 [10.50]	1980.03 [1976.05,1988.01]	0.232	0.0366
GMDCN	3.87 [0.10]	5.81 [0.24]	3.98 [0.82]	6.64 [0.56]	66.70 [37.22]	1970.11 [1960.02,1973.05]	1.09E-010	0.0231
GMDCS	2.39 [0.07]	3.07 [0.17]	5.31 [0.59]	2.68 [0.25]	-49.54 [7.32]	1965.12 [1963.01,1966.11]	2.08E-005	0.130

Miscellaneous

PMI	2753.22 [2.42]	3227.47 [6.01]	3760.97 [346.20]	1879.68 [550.27]	-50.02 [15.34]	1981.12 [1976.04,1991.01]	0.00181	0.330
PMP	3996.58 [3.00]	4444.99 [7.44]	4963.61 [497.12]	2067.97 [1064.28]	-58.34 [21.84]	1982.07 [1976.03,1991.01]	7.08E-005	0.427
PMNO	4310.91 [3.11]	4473.74 [7.72]	5354.78 [571.79]	2247.93 [908.83]	-58.02 [17.55]	1981.12 [1977.05,1991.12]	0.00112	0.817
PMDEL	3443.03 [3.05]	5474.82 [7.57]	6434.91 [553.97]	3218.62 [849.22]	-49.98 [13.88]	1981.11 [1980.04,1992.07]	4.82E-008	0.00918
PMNV	3723.19 [2.80]	3966.89 [6.93]	4530.26 [462.39]	2543.65 [734.94]	-43.85 [17.21]	1981.12 [1974.06,1997.10]	5.84E-009	0.608
PMEMP	3098.86 [2.55]	3189.88 [6.33]	3709.86 [397.51]	2126.28 [568.52]	-42.69 [16.51]	1981.09 [1972.09,1998.05]	2.56E-020	0.781
PMCP	4543.34 [3.23]	5037.54 [8.01]	4469.32 [549.44]	9907.97 [1608.60]	121.69 [45.15]	1990.08 [1988.08,1993.11]	2.24E-005	0.483
HHSNTN	3753.50 [3.03]	4899.70 [7.52]	4457.10 [436.50]	34111.10 [3546.11]	665.32 [109.30]	1991.02 [1990.11,1991.03]	7.70E-320	0.247
F6EDM	102.46 [0.51]	89.48 [1.27]	87.37 [12.32]	207.70 [92.16]	137.73 [110.69]	1991.02 [1989.09,1994.08]	2.75E-060	0.124
FTMC6	122.26 [0.55]	146.58 [1.35]	361.99 [103.22]	142.74 [13.79]	-60.57 [11.87]	1970.01 [1968.10,1970.08]	1.20E-036	0.145
FTMM6	78.00 [0.46]	84.90 [1.17]	114.58 [25.88]	79.34 [11.21]	-30.75 [18.45]	1970.09 [1965.02,1999.12]	0.0289	0.538

Results for SupW tests for structural change in unconditional volatility during recessions for individual series, when allowing for nonlinearity in the unconditional mean. The columns headed σ_E and σ_0 contain estimates of the unconditional standard deviation during expansions and recessions under the null hypothesis, respectively. Columns headed σ_1 and σ_2 contain estimates of the unconditional standard deviation during recessions before and after the break, respectively. The column headed $\Delta\sigma$ contains the percent change in standard deviation. The estimated volatility break date is given in the column headed τ_v , with the 90% confidence interval given in brackets. The column headed p-value_v contains the asymptotic p-value of the corresponding SupW test. The column headed p-value_{nl} contains the asymptotic p-value of the Wald test for nonlinearity in unconditional volatility. Figures in brackets below parameter estimates are standard errors.

Table A.11: Tests for structural change in expansion volatility

Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
Production								
IP	10.40 [0.32]	7.18 [0.13]	8.43 [0.44]	5.58 [0.50]	-33.76 [6.89]	1984.03 [1982.07,1990.04]	6.28E-005	0.0617
IPP	9.80 [0.31]	7.50 [0.13]	8.00 [0.36]	5.70 [0.68]	-28.73 [9.06]	1992.07 [1990.02,1999.07]	0.0168	0.134
IPF	10.71 [0.33]	8.12 [0.13]	8.52 [0.39]	6.66 [0.75]	-21.86 [9.49]	1992.07 [1987.01,1999.12]	0.264	0.0578
IPC	12.25 [0.36]	9.75 [0.15]	10.42 [0.48]	7.32 [0.92]	-29.82 [9.44]	1992.07 [1990.07,1999.10]	0.0198	0.0908
IPCD	35.29 [0.62]	24.39 [0.25]	23.47 [1.51]	26.63 [2.36]	13.45 [12.45]	1989.04 [1960.02,1999.12]	1.00	0.000196
IPCN	8.66 [0.32]	8.57 [0.13]	9.07 [0.39]	7.20 [0.64]	-20.61 [7.84]	1990.02 [1984.10,1999.12]	0.0168	0.920
IPE	15.55 [0.40]	12.08 [0.16]	12.94 [0.59]	9.07 [1.09]	-29.95 [9.02]	1992.04 [1989.02,1998.08]	0.0130	0.0945
IPI	12.66 [0.35]	9.42 [0.14]	10.25 [0.44]	6.44 [0.84]	-37.20 [8.64]	1992.06 [1991.07,1996.08]	3.39E-005	0.0138
IPM	13.70 [0.38]	9.67 [0.15]	12.01 [0.61]	6.68 [0.69]	-44.42 [6.37]	1984.03 [1983.07,1987.09]	7.73E-009	0.0617
IPMD	20.77 [0.46]	13.62 [0.19]	17.08 [0.92]	9.29 [1.03]	-45.59 [6.71]	1984.01 [1983.06,1987.11]	9.18E-006	0.0115
IPMND	18.26 [0.41]	11.12 [0.16]	11.87 [0.60]	8.18 [1.19]	-31.08 [10.62]	1992.12 [1991.06,1999.12]	0.00186	0.0104
IPMFG	11.61 [0.34]	7.82 [0.14]	9.13 [0.50]	6.18 [0.56]	-32.29 [7.16]	1984.01 [1982.03,1991.04]	0.000361	0.0436
IPD	15.86 [0.40]	10.44 [0.16]	12.16 [0.70]	8.30 [0.78]	-31.77 [7.56]	1984.01 [1981.01,1991.09]	0.0141	0.00509
IPN	10.35 [0.32]	7.54 [0.13]	8.32 [0.39]	5.44 [0.65]	-34.63 [8.35]	1990.01 [1988.12,1995.08]	1.65E-007	0.0715
IPMIN	14.28 [0.43]	12.84 [0.17]	13.94 [0.71]	9.87 [1.17]	-29.18 [9.12]	1990.01 [1987.06,1998.10]	0.0100	0.558
IPUT	16.18 [0.52]	18.59 [0.21]	13.09 [1.19]	24.19 [1.20]	84.89 [19.20]	1980.12 [1977.09,1981.07]	8.49E-012	0.331
IPX	839.85 [3.10]	562.31 [1.30]	689.56 [44.60]	460.36 [39.92]	-33.24 [7.22]	1984.03 [1982.08,1990.12]	0.000770	0.0709
IPXMCA	907.88 [3.07]	646.63 [1.24]	766.16 [40.79]	497.04 [45.63]	-35.13 [6.88]	1984.01 [1982.07,1989.11]	0.000575	0.0664
IPXDCA	1248.80 [3.76]	778.08 [1.57]	940.96 [66.57]	650.80 [58.84]	-30.84 [7.94]	1984.01 [1980.10,1992.04]	0.0166	0.00302
IPXNCA	857.49 [3.13]	637.51 [1.31]	727.86 [37.34]	462.52 [51.96]	-36.45 [7.85]	1990.01 [1989.02,1994.08]	3.12E-008	0.0920
IPXMIN	1484.20 [4.41]	1140.45 [1.85]	1281.87 [74.75]	866.54 [104.04]	-32.40 [9.02]	1990.01 [1988.04,1997.04]	0.00419	0.128
IPXUT	1551.79 [5.34]	1800.85 [2.23]	1344.73 [144.22]	2073.64 [111.53]	54.20 [18.50]	1980.12 [1975.08,1982.05]	0.00154	0.222
GMPYQ	5.14 [0.25]	4.02 [0.10]	3.38 [0.39]	4.27 [0.24]	26.24 [16.08]	1971.05 [1960.02,1989.07]	0.477	0.0694
GMYPXQ	5.01 [0.22]	3.95 [0.09]	3.25 [0.29]	4.26 [0.20]	31.21 [13.32]	1972.05 [1962.11,1977.10]	0.0171	0.0122
(Un)employment								
LHEL	2317.78 [5.44]	2383.31 [2.20]	1885.20 [116.73]	3253.35 [154.28]	72.57 [13.46]	1986.10 [1984.05,1987.10]	2.63E-009	0.836
LHELX	55.78 [0.80]	46.17 [0.32]	58.80 [3.45]	39.32 [2.54]	-33.13 [5.84]	1973.11 [1972.02,1980.02]	0.136	0.243
LHEM	3.42 [0.21]	3.18 [0.09]	4.59 [0.32]	2.80 [0.17]	-38.94 [5.61]	1968.02 [1967.02,1973.08]	3.76E-005	0.580
LHNAG	3.39 [0.20]	2.94 [0.08]	3.81 [0.27]	2.69 [0.14]	-29.34 [6.28]	1968.07 [1965.11,1976.05]	5.29E-005	0.316
LHUR	227.96 [1.52]	183.48 [0.61]	242.97 [19.51]	173.14 [8.13]	-28.74 [6.63]	1965.12 [1962.08,1970.09]	0.0112	0.268
LHU680	508.38 [2.69]	552.38 [1.09]	731.02 [60.56]	520.13 [25.73]	-28.85 [6.86]	1966.02 [1963.03,1973.08]	0.487	0.590
LHU5	54.62 [0.87]	58.91 [0.35]	67.92 [3.56]	50.49 [3.45]	-25.66 [6.40]	1979.09 [1975.06,1988.01]	0.112	0.623
LHU14	55.30 [0.87]	61.25 [0.35]	76.12 [4.79]	55.97 [2.85]	-26.47 [5.95]	1969.11 [1966.10,1978.01]	0.0762	0.485
LHU15	65.18 [0.86]	57.63 [0.35]	74.27 [4.64]	51.57 [2.80]	-30.57 [5.75]	1970.12 [1968.05,1976.06]	0.00817	0.345
LHU26	84.12 [1.04]	91.80 [0.42]	115.85 [6.78]	82.82 [4.14]	-28.51 [5.50]	1971.02 [1968.06,1976.07]	0.00248	0.479
LHU27	80.18 [1.02]	80.29 [0.41]	107.73 [5.26]	62.68 [4.21]	-41.81 [4.83]	1976.07 [1975.08,1979.05]	1.55E-005	0.992
LHCH	184.87 [1.85]	256.09 [0.81]	235.88 [13.10]	363.66 [30.22]	54.17 [15.41]	1989.10 [1985.10,1991.10]	0.0418	3.30E-005

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Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
LPNAG	2.56 [0.16]	1.78 [0.06]	2.24 [0.10]	1.21 [0.12]	-46.13 [5.82]	1984.02 [1983.05,1986.09]	2.14E-009	0.105
LP	3.11 [0.17]	2.07 [0.07]	2.60 [0.13]	1.39 [0.14]	-46.42 [6.06]	1984.02 [1983.07,1987.01]	5.04E-008	0.0679
LPGD	6.19 [0.23]	3.58 [0.09]	4.52 [0.23]	2.40 [0.26]	-46.84 [6.42]	1984.02 [1983.09,1987.07]	1.34E-010	0.00460
LPMI	15.34 [0.39]	9.26 [0.16]	10.39 [0.64]	7.30 [0.84]	-29.73 [9.14]	1986.09 [1983.01,1997.10]	0.0283	0.0446
LPCC	11.62 [0.43]	9.94 [0.17]	17.04 [1.28]	8.04 [0.66]	-52.83 [5.28]	1968.02 [1967.08,1972.03]	2.25E-008	0.281
LPEM	6.43 [0.23]	3.19 [0.09]	4.07 [0.23]	2.08 [0.26]	-48.92 [7.10]	1984.03 [1983.10,1988.02]	1.21E-007	0.00370
LPED	8.35 [0.29]	4.46 [0.12]	5.60 [0.36]	3.01 [0.40]	-46.12 [7.98]	1984.03 [1983.07,1989.07]	4.96E-005	0.00885
LPEN	4.75 [0.20]	2.44 [0.08]	3.24 [0.18]	1.65 [0.18]	-49.18 [6.36]	1980.09 [1980.02,1984.04]	3.82E-007	0.00733
LPSP	1.99 [0.14]	1.47 [0.06]	1.80 [0.09]	1.10 [0.09]	-38.86 [5.84]	1983.02 [1981.10,1986.08]	2.76E-006	0.00961
LPTU	3.93 [0.30]	4.51 [0.12]	5.71 [0.41]	3.40 [0.40]	-40.55 [8.16]	1979.09 [1976.02,1985.08]	0.0206	0.471
LPT	3.06 [0.19]	2.29 [0.08]	3.33 [0.25]	2.00 [0.13]	-39.90 [5.88]	1968.05 [1967.06,1974.10]	0.00242	0.0618
LPFR	1.88 [0.14]	1.87 [0.06]	1.71 [0.08]	2.34 [0.13]	37.17 [9.98]	1990.07 [1985.07,1993.05]	0.485	0.940
LPS	2.25 [0.16]	1.92 [0.06]	2.29 [0.11]	1.48 [0.12]	-35.34 [6.03]	1983.07 [1982.04,1988.01]	0.00164	0.206
LPGOV	4.34 [0.21]	2.22 [0.08]	2.54 [0.16]	1.22 [0.28]	-51.69 [11.42]	1991.09 [1991.07,1996.05]	1.03E-007	0.000164
LW	185.44 [1.55]	113.40 [0.61]	132.28 [9.97]	94.10 [10.08]	-28.87 [9.32]	1984.05 [1978.08,1996.10]	0.0512	0.0184
LPHRM	326.53 [2.06]	232.73 [0.83]	288.40 [20.07]	182.70 [19.03]	-36.65 [7.93]	1979.05 [1975.09,1986.06]	8.41E-005	0.128
LPMOSA	164.37 [1.52]	131.56 [0.61]	153.54 [10.94]	111.80 [10.37]	-27.18 [8.52]	1979.05 [1975.02,1995.08]	0.161	0.177

Wages and salaries

LEH	3.82 [0.21]	2.60 [0.08]	3.33 [0.15]	1.54 [0.19]	-53.85 [5.96]	1986.12 [1986.08,1988.11]	1.94E-015	0.00542
LEHCC	8.01 [0.31]	5.72 [0.12]	9.41 [0.77]	5.05 [0.33]	-46.35 [5.60]	1966.02 [1965.02,1969.06]	0.00169	0.0350
LEHM	5.06 [0.23]	3.31 [0.09]	4.20 [0.24]	2.36 [0.25]	-43.76 [6.65]	1981.05 [1979.11,1985.03]	3.63E-007	0.00128
LEHTU	4.73 [0.27]	4.44 [0.11]	5.85 [0.30]	3.04 [0.30]	-48.10 [5.86]	1984.03 [1983.09,1986.11]	4.40E-008	0.680
LEHTT	3.92 [0.21]	2.88 [0.08]	3.33 [0.16]	2.19 [0.20]	-34.05 [6.92]	1987.06 [1986.05,1992.06]	1.44E-005	0.0116
LEHFR	7.26 [0.31]	5.66 [0.12]	7.29 [0.31]	2.29 [0.45]	-68.62 [6.28]	1989.06 [1989.04,1990.07]	6.13E-019	0.140
LEHS	5.11 [0.24]	3.41 [0.10]	4.36 [0.20]	1.55 [0.28]	-64.40 [6.58]	1989.02 [1988.12,1990.07]	4.68E-020	0.000228

Construction

HSFR	135.78 [1.09]	86.07 [0.44]	97.05 [5.03]	70.27 [6.03]	-27.60 [7.26]	1985.03 [1981.05,1993.06]	0.00231	5.64E-006
HSNE	299.16 [1.66]	209.54 [0.67]	226.58 [12.09]	187.58 [13.73]	-17.21 [7.50]	1984.04 [1976.09,1999.12]	0.482	0.000460
HSMW	209.29 [1.57]	177.84 [0.63]	191.28 [9.38]	140.94 [15.55]	-26.32 [8.89]	1990.02 [1984.04,1998.11]	0.0179	0.259
HSSOU	160.13 [1.22]	105.66 [0.49]	112.80 [6.49]	96.46 [7.37]	-14.49 [8.18]	1984.04 [1966.03,1999.12]	0.533	0.000610
HSWST	175.47 [1.31]	138.65 [0.53]	135.00 [6.75]	147.44 [10.47]	9.21 [9.48]	1989.03 [1960.02,1999.12]	0.969	0.0255
HSBR	98.89 [0.98]	64.33 [0.39]	71.63 [3.60]	43.26 [6.12]	-39.60 [9.06]	1990.06 [1989.09,1995.06]	2.43E-005	0.0204
HSBNE	153.28 [1.48]	131.11 [0.56]	150.59 [8.34]	106.57 [9.35]	-29.24 [7.34]	1984.03 [1981.01,1992.05]	0.0414	0.347
HSBMW	157.54 [1.44]	110.40 [0.54]	124.59 [6.79]	70.37 [11.40]	-43.52 [9.66]	1990.05 [1989.07,1995.01]	2.14E-007	0.0930
HSBSOU	113.94 [1.14]	82.22 [0.43]	86.98 [4.33]	69.28 [7.14]	-20.35 [9.11]	1990.02 [1985.11,1999.12]	0.288	0.00426
HSBWST	140.70 [1.28]	96.06 [0.48]	102.00 [5.79]	85.01 [7.89]	-16.66 [9.07]	1987.05 [1977.09,1999.12]	0.476	0.0285
HNS	123.79 [1.09]	79.34 [0.43]	81.64 [3.84]	68.58 [8.30]	-16.00 [10.91]	1994.06 [1987.11,1999.12]	0.180	0.0116
HNSNE	247.45 [2.15]	210.05 [0.87]	164.67 [21.90]	231.24 [14.97]	40.43 [20.77]	1984.02 [1976.12,1990.09]	0.0302	0.569
HNSMW	227.77 [1.80]	148.54 [0.73]	97.67 [24.88]	155.47 [9.18]	59.18 [41.62]	1977.11 [1974.02,1981.02]	0.00331	0.0214

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Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
HNSSOU	164.53 [1.48]	113.06 [0.60]	135.14 [9.76]	101.06 [7.19]	-25.22 [7.58]	1984.11 [1980.12,1993.02]	0.119	0.0102
HNSWST	214.21 [1.67]	138.43 [0.68]	125.81 [9.38]	160.20 [12.32]	27.33 [13.64]	1991.10 [1978.08,1999.02]	0.264	0.0220
HNR	1054.50 [2.99]	516.66 [1.17]	542.59 [28.94]	395.70 [62.53]	-27.07 [12.16]	1994.06 [1991.01,1999.12]	0.173	0.00267
HMOB	83.94 [0.85]	46.77 [0.34]	57.93 [3.32]	35.71 [3.30]	-38.35 [6.71]	1980.09 [1979.03,1986.02]	2.09E-006	0.000780
CONTC	23.69 [0.51]	16.93 [0.20]	20.31 [1.10]	13.59 [1.10]	-33.06 [6.50]	1984.02 [1982.02,1989.04]	0.000214	0.0116
CONPC	22.52 [0.54]	17.23 [0.21]	23.40 [1.45]	14.16 [1.02]	-39.48 [5.77]	1977.04 [1976.03,1981.07]	0.0181	0.145
CONQC	46.45 [0.74]	34.63 [0.29]	40.57 [2.34]	29.07 [2.26]	-28.36 [6.93]	1983.09 [1980.01,1990.09]	0.0673	0.0467
CONDO9	126.56 [1.22]	110.04 [0.49]	73.89 [11.79]	117.44 [5.33]	58.95 [26.37]	1966.09 [1961.12,1968.02]	2.27E-005	0.397
Trade								
MSMTQ	11.08 [0.37]	11.37 [0.15]	12.12 [0.50]	8.58 [0.97]	-29.19 [8.56]	1992.09 [1991.01,1998.10]	0.000970	0.776
MSMQ	15.75 [0.44]	15.65 [0.18]	16.31 [0.71]	12.78 [1.49]	-21.67 [9.76]	1993.07 [1989.06,1999.12]	0.0600	0.943
MSDQ	22.65 [0.53]	22.68 [0.22]	27.88 [1.91]	21.06 [1.07]	-24.47 [6.44]	1969.01 [1964.04,1977.06]	0.00655	0.988
MSNQ	13.63 [0.40]	12.63 [0.16]	13.45 [0.72]	11.69 [0.77]	-13.09 [7.38]	1983.04 [1966.09,1999.12]	0.698	0.527
WTQ	16.47 [0.45]	16.12 [0.18]	18.56 [0.81]	11.62 [1.10]	-37.40 [6.56]	1987.03 [1986.01,1990.12]	9.73E-008	0.875
WTDQ	20.13 [0.47]	17.72 [0.19]	18.97 [0.82]	12.55 [1.66]	-33.85 [9.23]	1993.04 [1991.04,1998.01]	0.00141	0.268
WTNQ	24.04 [0.54]	21.61 [0.22]	25.46 [1.31]	17.40 [1.37]	-31.68 [6.41]	1981.07 [1979.06,1987.10]	4.12E-007	0.501
RTQ	16.72 [0.44]	12.85 [0.18]	15.12 [0.78]	8.71 [1.05]	-42.41 [7.57]	1987.02 [1986.04,1991.05]	2.06E-006	0.0553
RTDQ	39.22 [0.68]	27.30 [0.28]	31.48 [1.76]	15.84 [2.91]	-49.69 [9.66]	1990.02 [1989.10,1994.02]	1.33E-006	0.0116
RTNQ	11.16 [0.36]	10.12 [0.15]	13.41 [0.57]	6.95 [0.56]	-48.16 [4.75]	1979.12 [1979.05,1981.11]	4.82E-008	0.326
Inventories								
IVMTQ	5.68 [0.22]	4.01 [0.09]	4.52 [0.22]	3.31 [0.25]	-26.68 [6.61]	1984.10 [1981.12,1992.08]	0.00230	0.00144
IVMFGQ	5.82 [0.24]	4.65 [0.10]	5.14 [0.25]	3.87 [0.31]	-24.76 [7.03]	1986.01 [1982.05,1995.04]	0.0754	0.0455
IVMFDQ	7.30 [0.28]	6.30 [0.11]	7.09 [0.32]	5.04 [0.40]	-28.85 [6.48]	1986.02 [1983.10,1992.02]	0.0129	0.142
IVMFNQ	6.39 [0.26]	5.32 [0.10]	5.99 [0.26]	4.13 [0.35]	-31.12 [6.61]	1986.12 [1985.01,1992.02]	5.16E-005	0.0456
IVWRQ	11.93 [0.33]	7.90 [0.13]	9.17 [0.45]	6.14 [0.53]	-33.09 [6.70]	1984.12 [1982.12,1990.05]	4.82E-005	0.0111
IVRRQ	9.92 [0.33]	8.30 [0.13]	9.21 [0.43]	6.43 [0.62]	-30.13 [7.47]	1988.01 [1985.02,1994.03]	0.000105	0.107
IVSRQ	18.03 [0.46]	16.08 [0.18]	17.25 [0.77]	11.70 [1.48]	-32.19 [9.10]	1992.09 [1991.03,1998.06]	0.00110	0.309
IVSRMQ	28.16 [0.57]	24.47 [0.23]	25.76 [1.17]	18.85 [2.43]	-26.80 [10.00]	1993.07 [1991.05,1999.12]	0.00690	0.110
IVSRWQ	21.59 [0.50]	20.57 [0.20]	13.76 [2.15]	21.76 [0.90]	58.09 [25.54]	1965.12 [1962.02,1967.10]	3.98E-005	0.725
IVSRRQ	26.22 [0.55]	19.51 [0.22]	21.19 [1.14]	14.83 [1.90]	-30.01 [9.75]	1990.03 [1987.08,1999.08]	0.00226	0.0854
Orders								
MOCMQ	32.36 [0.59]	26.68 [0.24]	35.25 [2.33]	24.15 [1.27]	-31.50 [5.78]	1968.09 [1966.02,1973.04]	0.000121	0.158
MDOQ	46.96 [0.66]	36.24 [0.27]	38.09 [1.61]	28.67 [3.25]	-24.73 [9.10]	1993.03 [1990.01,1999.12]	0.00145	0.0180
MSONDQ	88.28 [1.07]	84.18 [0.43]	51.48 [8.10]	92.69 [4.13]	80.03 [29.45]	1967.12 [1964.10,1968.11]	4.64E-005	0.761
MO	27.57 [0.51]	21.74 [0.21]	22.77 [0.96]	17.27 [2.00]	-24.15 [9.35]	1993.07 [1990.03,1999.12]	0.00267	0.0552
MOWU	41.39 [0.62]	32.20 [0.25]	33.60 [1.41]	26.15 [2.94]	-22.17 [9.34]	1993.07 [1989.02,1999.12]	0.0119	0.00846
MDO	46.98 [0.66]	36.35 [0.27]	38.16 [1.61]	28.96 [3.24]	-24.11 [9.08]	1993.03 [1990.01,1999.12]	0.00156	0.0174
MDUWU	49.54 [0.69]	39.35 [0.28]	40.75 [1.74]	33.60 [3.51]	-17.55 [9.31]	1993.03 [1985.10,1999.12]	0.150	0.0109
MNO	18.48 [0.42]	13.19 [0.17]	10.93 [1.04]	14.20 [0.70]	29.92 [13.96]	1972.05 [1961.01,1979.03]	0.0861	0.0350
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Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
MNOU	23.17 [0.52]	22.17 [0.21]	23.86 [1.22]	20.39 [1.26]	-14.57 [6.86]	1981.04 [1968.02,1999.12]	0.437	0.686
MU	14.17 [0.36]	10.48 [0.15]	13.11 [0.60]	8.14 [0.57]	-37.94 [5.20]	1979.04 [1978.04,1982.10]	0.00214	0.231
MDU	14.60 [0.37]	10.89 [0.15]	13.63 [0.63]	8.45 [0.59]	-37.97 [5.18]	1979.04 [1978.04,1982.10]	0.00242	0.232
MNU	26.42 [0.51]	19.35 [0.21]	22.60 [1.22]	16.23 [1.20]	-28.20 [6.57]	1979.12 [1976.10,1987.12]	0.0263	0.0635
MPCON	86.96 [1.04]	84.73 [0.42]	55.11 [7.71]	92.42 [3.93]	67.71 [24.52]	1967.12 [1964.07,1969.01]	8.08E-006	0.847
MPCONQ	86.50 [1.03]	84.31 [0.42]	57.33 [7.59]	91.33 [3.87]	59.31 [22.13]	1967.12 [1963.12,1969.04]	5.72E-005	0.838

Consumption

GMCQ	7.70 [0.29]	6.25 [0.12]	7.11 [0.33]	4.69 [0.45]	-34.03 [7.03]	1987.02 [1985.09,1992.04]	9.49E-005	0.0244
GMCDQ	42.65 [0.66]	29.57 [0.27]	32.48 [1.66]	21.58 [2.75]	-33.56 [9.13]	1990.02 [1988.09,1997.02]	0.0291	0.00276
GMCNQ	8.32 [0.32]	8.27 [0.13]	9.60 [0.42]	5.84 [0.57]	-39.19 [6.45]	1987.03 [1985.09,1990.04]	2.34E-007	0.957
GMCSQ	4.09 [0.22]	3.76 [0.09]	2.39 [0.30]	4.33 [0.19]	80.94 [23.94]	1971.11 [1968.10,1972.05]	1.35E-005	0.434
GMCANQ	129.98 [1.14]	79.47 [0.46]	86.95 [4.97]	58.92 [8.23]	-32.23 [10.23]	1990.02 [1987.10,1999.05]	0.0686	0.000783

Money and credit

FM1	5.46 [0.26]	5.17 [0.10]	4.10 [0.32]	6.12 [0.30]	48.99 [13.70]	1979.03 [1973.08,1980.12]	0.0159	0.781
FM2	3.39 [0.21]	3.39 [0.09]	1.81 [0.37]	3.68 [0.16]	103.35 [42.14]	1966.03 [1963.11,1966.09]	0.000226	0.996
FM3	4.33 [0.21]	3.67 [0.09]	1.92 [0.37]	3.99 [0.16]	107.71 [40.42]	1966.04 [1964.05,1966.10]	0.000269	0.343
FML	4.65 [0.24]	4.90 [0.10]	4.58 [0.22]	5.93 [0.39]	29.37 [10.46]	1990.04 [1982.02,1995.04]	0.0882	0.551
FM2DQ	5.47 [0.23]	4.17 [0.09]	2.79 [0.35]	4.59 [0.19]	64.61 [21.88]	1968.12 [1965.04,1969.11]	8.58E-006	0.0159
FMFBA	3.69 [0.19]	2.97 [0.08]	2.82 [0.14]	3.53 [0.26]	25.41 [11.14]	1992.06 [1981.02,1999.12]	0.495	0.231
FMBASE	4.73 [0.24]	4.24 [0.10]	3.58 [0.26]	4.85 [0.25]	35.52 [12.12]	1979.09 [1970.11,1983.06]	0.00939	0.351
FMRRA	9.16 [0.36]	11.48 [0.15]	10.17 [0.65]	12.48 [0.56]	22.69 [9.56]	1977.12 [1965.02,1985.08]	0.0905	0.00589
FMRNBA	24.42 [0.56]	16.84 [0.23]	12.45 [1.57]	20.01 [1.33]	60.67 [22.88]	1977.07 [1969.02,1979.10]	0.00634	0.119
FMRNBC	19.82 [0.47]	15.11 [0.20]	10.05 [1.58]	16.61 [0.86]	65.31 [27.34]	1968.01 [1963.01,1968.12]	7.43E-008	0.160
FCLS	4.51 [0.29]	3.95 [0.12]	3.60 [0.25]	5.24 [0.47]	45.79 [16.34]	1995.02 [1986.07,1996.12]	0.327	0.465
FCSGV	14.29 [0.47]	11.61 [0.19]	14.64 [0.87]	9.07 [0.80]	-38.09 [6.56]	1987.03 [1986.01,1990.07]	0.00559	0.234
FCLRE	3.53 [0.29]	4.53 [0.12]	6.11 [0.41]	3.90 [0.26]	-36.12 [6.02]	1983.05 [1981.02,1985.02]	0.175	0.222
FCLIN	5.56 [0.34]	6.89 [0.14]	5.97 [0.40]	8.29 [0.49]	38.91 [12.32]	1990.06 [1986.04,1993.08]	0.388	0.391
FCLNBF	21.39 [0.62]	18.98 [0.30]	13.83 [1.61]	24.79 [1.71]	79.24 [24.26]	1985.09 [1983.02,1986.12]	0.000120	0.580
FCLNQ	12.48 [0.37]	10.41 [0.15]	7.18 [0.84]	11.63 [0.51]	62.02 [20.16]	1971.03 [1967.03,1972.05]	0.00220	0.106
FCLBMC	31771.87 [26.65]	36358.96 [10.75]	10882.39 [2959.99]	60161.01 [2861.06]	452.83 [152.65]	1979.09 [1978.07,1979.10]	7.42E-011	0.586
CCI30M	82.63 [1.21]	96.35 [0.52]	48.58 [7.61]	128.06 [6.20]	163.60 [43.20]	1973.10 [1971.12,1973.11]	1.01E-019	0.322
CCINT	3015092.81 [316.32]	2821256.34 [120.71]	714487.63 [414334.79]	3426952.34 [222162.28]	379.64 [279.88]	1979.11 [1979.10,1979.11]	3.07E-014	0.758
CCINV	1225510.62 [217.13]	1414322.23 [82.86]	361000.85 [173090.51]	1797982.33 [104463.88]	398.05 [240.55]	1981.02 [1980.08,1981.03]	4.39E-020	0.512

Stock prices

FSNCOM	63.59 [0.70]	34.87 [0.28]	37.57 [1.96]	29.01 [2.88]	-22.80 [8.66]	1988.06 [1982.02,1999.12]	0.284	1.79E-005
FSNIN	71.06 [0.79]	36.08 [0.32]	41.29 [2.43]	27.73 [3.08]	-32.83 [8.44]	1988.06 [1985.11,1995.02]	0.00745	3.81E-007
FSNTR	91.29 [0.89]	53.08 [0.36]	58.12 [2.96]	43.04 [4.18]	-25.94 [8.12]	1989.11 [1984.12,1997.05]	0.0516	6.75E-010
FSNUT	55.56 [0.69]	33.41 [0.28]	40.96 [2.99]	31.02 [1.68]	-24.26 [6.88]	1976.01 [1972.07,1985.12]	0.0580	0.000410
FSNFI	87.87 [0.88]	48.28 [0.36]	52.84 [3.05]	41.32 [3.76]	-21.80 [8.43]	1988.02 [1979.11,1999.12]	0.319	0.000162

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Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
FSPCOM	61.50 [0.70]	34.47 [0.28]	36.24 [1.92]	30.56 [2.86]	-15.66 [9.07]	1988.08 [1973.12,1999.12]	0.782	1.97E-005
FSPIN	62.76 [0.71]	35.02 [0.28]	37.25 [1.97]	30.06 [2.93]	-19.32 [8.95]	1988.08 [1979.06,1999.12]	0.390	1.61E-005
FSPCAP	71.19 [0.77]	41.19 [0.31]	43.86 [2.30]	34.74 [3.57]	-20.80 [9.14]	1989.03 [1978.09,1999.12]	0.309	1.71E-005
FSPTR	89.33 [0.98]	51.90 [0.38]	56.45 [3.20]	44.33 [4.13]	-21.47 [8.57]	1989.11 [1982.11,1999.12]	0.199	3.48E-010
FSPUT	57.76 [0.67]	34.75 [0.27]	37.70 [2.43]	32.97 [1.89]	-12.53 [7.54]	1976.01 [1960.02,1999.12]	0.894	0.00373
FSPFI	98.50 [0.99]	52.15 [0.39]	49.92 [2.86]	62.59 [6.18]	25.39 [14.30]	1995.07 [1983.04,1999.12]	0.761	5.01E-005

Dividends and volume

FSDXP	65.62 [0.73]	36.55 [0.30]	35.44 [1.95]	41.80 [4.23]	17.96 [13.59]	1993.12 [1960.02,1999.12]	0.899	3.22E-005
FSPXE	66.39 [0.76]	43.72 [0.31]	38.80 [3.75]	45.46 [2.23]	17.17 [12.70]	1969.11 [1960.02,1986.02]	0.753	1.87E-005
FSNVV3	45.00 [1.11]	36.91 [0.41]	65.09 [4.44]	26.32 [2.72]	-59.57 [5.01]	1981.02 [1980.10,1982.10]	1.74E-008	0.505

Interest rates

FYFF	1008.33 [3.30]	379.27 [1.33]	462.61 [42.14]	178.83 [65.36]	-61.34 [14.56]	1989.03 [1988.12,1996.04]	0.00277	0.00383
FYCP	1004.33 [3.11]	393.14 [1.30]	190.05 [63.22]	466.60 [38.02]	145.51 [84.09]	1969.05 [1963.07,1969.08]	0.000264	0.00871
FYGM3	916.30 [2.92]	331.99 [1.18]	405.20 [36.00]	223.48 [43.82]	-44.85 [11.87]	1985.06 [1984.11,1997.03]	0.00541	0.0118
FYGM6	872.30 [2.78]	344.52 [1.12]	160.91 [62.90]	379.54 [27.47]	135.87 [93.76]	1966.05 [1961.01,1966.11]	0.000936	0.0142
FYGT1	891.81 [2.82]	382.92 [1.14]	206.33 [52.02]	441.02 [29.84]	113.75 [55.79]	1969.05 [1964.02,1969.11]	4.77E-006	0.0231
FYGT5	627.67 [2.35]	325.24 [0.95]	165.37 [35.09]	379.92 [20.52]	129.74 [50.30]	1969.08 [1966.08,1969.12]	9.62E-011	0.0277
FYGT10	519.15 [2.17]	275.66 [0.87]	185.56 [21.62]	359.03 [20.80]	93.48 [25.18]	1979.08 [1975.08,1980.05]	4.70E-014	0.0350
FYAAAC	410.26 [1.96]	203.43 [0.79]	118.84 [17.61]	279.44 [16.70]	135.13 [37.58]	1979.05 [1976.03,1979.10]	1.51E-011	0.0515
FYBAAC	349.17 [1.84]	197.93 [0.74]	120.69 [15.29]	269.40 [14.71]	123.22 [30.80]	1979.08 [1976.09,1980.01]	1.86E-015	0.0471
FWAFIT	493.11 [2.69]	321.74 [1.27]	484.31 [35.27]	229.58 [26.56]	-52.60 [6.48]	1983.01 [1982.08,1985.02]	0.000199	0.0144
FYFHA	509.26 [2.32]	266.74 [0.94]	146.14 [24.56]	378.32 [23.62]	158.87 [46.41]	1979.08 [1976.06,1979.12]	6.48E-015	0.0936

Exchange rates

EXRUS	26.93 [0.71]	19.88 [0.25]	13.21 [2.17]	21.57 [1.09]	63.22 [28.08]	1979.09 [1976.07,1981.02]	0.0712	0.00401
EXRGER	34.61 [0.86]	31.50 [0.30]	24.52 [3.02]	33.65 [1.68]	37.23 [18.25]	1980.09 [1975.05,1984.06]	0.0796	0.452
EXRSW	41.89 [0.94]	34.70 [0.33]	27.30 [3.60]	36.89 [1.96]	35.14 [19.19]	1980.10 [1975.02,1986.08]	0.508	0.255
EXRJAN	41.90 [0.93]	32.13 [0.32]	24.17 [4.23]	33.62 [1.83]	39.11 [25.48]	1978.09 [1975.02,1982.01]	0.784	0.0151
EXRUK	30.36 [0.88]	29.37 [0.30]	34.31 [1.74]	17.82 [2.66]	-48.07 [8.18]	1993.04 [1992.11,1995.05]	8.27E-009	0.816
EXRCAN	12.32 [0.54]	12.65 [0.19]	11.28 [0.85]	13.76 [0.76]	21.94 [11.41]	1986.12 [1977.03,1997.08]	0.442	0.878

Producer prices

PWFSA	8.16 [0.27]	4.75 [0.11]	5.37 [0.27]	3.08 [0.45]	-42.57 [8.85]	1990.01 [1988.12,1994.03]	0.000259	0.0118
PWFCSA	8.86 [0.30]	5.71 [0.12]	6.37 [0.33]	3.88 [0.55]	-39.07 [9.23]	1990.03 [1988.08,1995.05]	0.00208	0.0278
PWIMSA	11.63 [0.30]	5.09 [0.12]	5.86 [0.41]	4.27 [0.42]	-27.17 [8.82]	1981.04 [1977.12,1998.06]	0.159	0.0178
PWCMSA	32.80 [0.61]	20.62 [0.25]	17.95 [1.31]	33.25 [2.85]	85.26 [20.88]	1993.12 [1991.02,1995.08]	0.0272	0.203
PWFXSA	8.69 [0.30]	4.79 [0.12]	5.38 [0.34]	3.62 [0.47]	-32.72 [9.79]	1990.02 [1987.07,1998.02]	0.0849	0.00184
PW160A	21.16 [0.69]	19.02 [0.24]	26.66 [2.26]	17.55 [0.99]	-34.18 [6.69]	1978.10 [1976.10,1980.10]	7.53E-005	0.695
PW150A	17.16 [0.72]	18.25 [0.25]	26.99 [1.94]	15.32 [1.12]	-43.24 [5.83]	1981.04 [1980.07,1984.04]	0.000682	0.713
PW561	84.52 [1.03]	47.45 [0.42]	19.31 [3.96]	92.23 [4.99]	377.71 [101.30]	1986.01 [1984.06,1986.02]	1.19E-012	0.154
PWCM	8.44 [0.29]	6.06 [0.12]	7.35 [0.39]	4.69 [0.40]	-36.20 [6.44]	1981.04 [1979.12,1986.09]	0.0160	0.204

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Series	σ_R	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
PWXFA	11.39 [0.31]	4.89 [0.13]	6.28 [0.70]	4.59 [0.33]	-26.92 [9.68]	1973.10 [1968.02,1985.04]	0.878	0.00183
PSM99Q	19.55 [0.47]	16.96 [0.19]	12.49 [1.84]	17.80 [0.80]	42.58 [22.01]	1966.04 [1960.02,1968.10]	0.0320	0.546
PSCCOM	23.04 [0.55]	21.32 [0.22]	16.91 [1.73]	23.35 [1.18]	38.08 [15.78]	1972.08 [1962.11,1975.01]	0.0400	0.707
PSCFOO	36.18 [0.68]	31.17 [0.27]	23.02 [2.65]	35.05 [1.83]	52.27 [19.21]	1972.11 [1965.10,1973.11]	0.0247	0.496
PSCMAT	25.48 [0.53]	22.82 [0.21]	24.18 [1.13]	20.17 [1.58]	-16.61 [7.62]	1987.08 [1978.06,1999.12]	0.233	0.554
PZFR	22.62 [0.76]	20.74 [0.26]	25.07 [2.27]	19.53 [1.20]	-22.10 [8.53]	1981.03 [1976.03,1992.08]	0.416	0.390
PCGOLD	81.38 [1.36]	47.11 [0.47]	76.75 [6.68]	37.28 [3.85]	-51.42 [6.56]	1983.03 [1982.09,1986.05]	0.0178	0.0173

Consumer prices

PUNEW	4.86 [0.20]	2.88 [0.08]	1.99 [0.23]	3.31 [0.16]	66.34 [20.86]	1973.01 [1968.09,1974.01]	0.00197	0.00233
PU81	5.77 [0.30]	4.35 [0.12]	6.89 [0.47]	3.13 [0.32]	-54.63 [5.60]	1979.02 [1978.11,1982.04]	6.50E-005	0.192
PUH	6.14 [0.23]	2.57 [0.10]	4.13 [0.25]	1.52 [0.20]	-63.13 [5.37]	1983.01 [1982.11,1984.11]	0.000165	4.42E-005
PU83	3.55 [0.24]	4.13 [0.10]	3.19 [0.22]	5.64 [0.28]	76.82 [15.26]	1986.01 [1982.11,1986.10]	2.50E-005	0.350
PU84	9.28 [0.31]	6.23 [0.12]	6.64 [0.37]	5.11 [0.61]	-23.00 [10.07]	1990.01 [1981.09,1999.12]	0.479	0.0242
PU85	3.78 [0.19]	3.06 [0.08]	3.74 [0.16]	2.27 [0.17]	-39.29 [5.17]	1983.03 [1982.06,1986.02]	0.000986	0.323
PUC	5.69 [0.23]	3.80 [0.09]	4.33 [0.23]	2.93 [0.29]	-32.38 [7.57]	1986.04 [1983.07,1992.09]	0.00980	0.0102
PUCD	5.60 [0.22]	3.45 [0.09]	4.22 [0.20]	2.30 [0.24]	-45.63 [6.32]	1985.07 [1984.12,1988.07]	7.55E-005	0.0260
PUS	5.18 [0.21]	3.15 [0.08]	4.02 [0.19]	2.18 [0.20]	-45.85 [5.62]	1982.12 [1982.08,1986.01]	0.00796	0.0230
PUXF	5.18 [0.20]	2.94 [0.08]	3.43 [0.18]	2.39 [0.20]	-30.27 [6.89]	1983.04 [1980.10,1990.09]	0.133	0.000834
PUXHS	4.57 [0.21]	3.17 [0.08]	3.56 [0.19]	2.74 [0.21]	-22.90 [7.14]	1983.02 [1977.04,1995.01]	0.254	0.0294
PUXM	4.96 [0.21]	3.13 [0.08]	3.64 [0.19]	2.54 [0.20]	-30.13 [6.62]	1983.04 [1981.03,1990.06]	0.200	0.00612
GMDC	3.85 [0.18]	2.32 [0.07]	1.31 [0.17]	2.81 [0.12]	113.66 [29.03]	1973.01 [1971.02,1973.06]	2.10E-005	0.00471
GMDCD	5.14 [0.22]	3.05 [0.09]	3.63 [0.21]	2.43 [0.22]	-33.13 [7.11]	1981.07 [1979.06,1988.11]	0.00749	0.0135
GMDCN	5.81 [0.23]	3.68 [0.09]	4.04 [0.21]	2.68 [0.35]	-33.60 [9.28]	1990.02 [1988.04,1997.02]	0.0303	0.0118
GMDCS	3.07 [0.17]	2.05 [0.07]	1.12 [0.14]	2.56 [0.11]	128.43 [30.45]	1975.04 [1973.08,1975.09]	1.98E-007	0.0261

Miscellaneous

PMI	3227.47 [5.99]	2750.39 [2.42]	3197.36 [153.24]	2145.07 [178.33]	-32.91 [6.44]	1984.09 [1982.08,1989.09]	0.00262	0.326
PMP	4444.99 [7.43]	3995.41 [3.00]	4620.93 [236.63]	3156.65 [274.01]	-31.69 [6.88]	1984.08 [1982.08,1991.02]	0.00621	0.425
PMNO	4473.74 [7.72]	4304.39 [3.11]	4650.68 [257.83]	3830.73 [301.54]	-17.63 [7.93]	1984.10 [1975.08,1999.12]	0.398	0.810
PMDEL	5474.82 [7.56]	3408.64 [3.05]	4389.18 [238.65]	2067.45 [279.11]	-52.90 [6.86]	1984.10 [1984.05,1987.10]	9.70E-009	0.00824
PMNV	3966.89 [6.94]	3699.79 [2.80]	4214.54 [210.44]	3055.65 [235.41]	-27.50 [6.66]	1984.01 [1980.04,1991.03]	0.00488	0.573
PMEMP	3189.88 [6.32]	3091.45 [2.55]	3502.44 [157.49]	2248.17 [225.60]	-35.81 [7.06]	1988.01 [1986.09,1992.06]	0.000318	0.764
PMCP	5037.54 [8.00]	4535.85 [3.23]	5246.77 [314.94]	3973.30 [280.16]	-24.27 [7.01]	1978.04 [1973.03,1990.05]	0.100	0.475
HHSNTN	4899.70 [7.51]	3752.69 [3.03]	2039.50 [261.72]	5081.90 [230.53]	149.17 [33.91]	1978.02 [1976.05,1978.05]	8.14E-014	0.248
F6EDM	89.48 [1.27]	102.93 [0.50]	143.19 [10.28]	92.23 [5.30]	-35.59 [5.92]	1972.04 [1971.01,1977.10]	0.00373	0.115
FTMC6	146.58 [1.31]	116.71 [0.54]	126.85 [5.99]	83.33 [10.87]	-34.31 [9.11]	1991.06 [1990.02,1996.02]	0.000665	0.0594
FTMM6	84.90 [1.14]	76.72 [0.45]	93.95 [4.81]	50.93 [5.89]	-45.79 [6.85]	1987.03 [1986.09,1990.05]	1.79E-009	0.457

Results for SupW tests for structural change in unconditional volatility during expansions for individual series, when allowing for nonlinearity and structural change during expansions in the unconditional mean. The columns headed σ_R and σ_0 contain estimates of the unconditional standard deviation during recessions and expansions under the null hypothesis, respectively. Columns headed σ_1 and σ_2 contain estimates of the unconditional standard deviation during expansions before and after the break, respectively. The column headed $\Delta\sigma$ contains the percent change in standard deviation. The estimated volatility break date is given in the column headed τ_v , with the 90% confidence interval given in brackets. The column headed p-value_v contains the asymptotic p -value of the corresponding SupW test. The column headed p-value_{nl} contains the asymptotic p -value of the Wald test for nonlinearity in unconditional volatility. Figures in brackets below parameter estimates are standard errors.

Table A.12: Tests for structural change in recession volatility

Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
Production								
IP	7.18 [0.13]	10.40 [0.32]	12.51 [0.95]	4.21 [1.63]	-66.34 [13.30]	1982.02 [1980.07,1986.07]	4.49E-006	0.0617
IPP	7.50 [0.13]	9.80 [0.31]	11.71 [0.90]	4.18 [1.54]	-64.29 [13.43]	1982.02 [1980.01,1986.07]	1.12E-005	0.134
IPF	8.12 [0.13]	10.71 [0.33]	12.17 [0.99]	6.42 [1.71]	-47.26 [14.66]	1982.02 [1977.12,1991.05]	4.91E-010	0.0578
IPC	9.75 [0.15]	12.25 [0.36]	14.43 [1.36]	8.81 [1.71]	-38.97 [13.19]	1980.05 [1974.07,1996.08]	0.000200	0.0908
IPCD	24.39 [0.25]	35.29 [0.62]	30.39 [4.57]	39.78 [4.37]	30.92 [24.39]	1974.10 [1960.02,1999.12]	0.00694	0.000196
IPCN	8.57 [0.13]	8.66 [0.32]	9.42 [0.94]	6.01 [1.74]	-36.23 [19.56]	1982.04 [1966.03,1999.12]	3.51E-010	0.920
IPE	12.08 [0.16]	15.55 [0.40]	9.96 [2.48]	17.61 [1.50]	76.78 [46.51]	1970.08 [1960.02,1975.04]	2.46E-008	0.0945
IPI	9.42 [0.14]	12.66 [0.35]	9.88 [1.72]	14.02 [1.20]	41.94 [27.58]	1973.12 [1960.02,1991.10]	2.59E-006	0.0138
IPM	9.67 [0.15]	13.70 [0.38]	16.21 [1.33]	6.32 [2.29]	-61.04 [14.46]	1982.02 [1980.05,1988.06]	7.16E-006	0.0617
IPMD	13.62 [0.19]	20.77 [0.46]	24.83 [2.00]	8.84 [3.43]	-64.41 [14.12]	1982.02 [1980.11,1987.10]	1.92E-012	0.0115
IPMND	11.12 [0.16]	18.26 [0.41]	12.21 [1.94]	23.47 [1.80]	92.14 [33.87]	1974.09 [1969.01,1976.12]	0.00393	0.0104
IPMFG	7.82 [0.14]	11.61 [0.34]	13.71 [1.07]	5.45 [1.84]	-60.23 [13.75]	1982.02 [1980.04,1987.10]	2.11E-007	0.0436
IPD	10.44 [0.16]	15.86 [0.40]	18.57 [1.50]	7.88 [2.57]	-57.58 [14.28]	1982.02 [1979.06,1988.05]	1.86E-015	0.00509
IPN	7.54 [0.13]	10.35 [0.32]	11.58 [0.97]	6.73 [1.66]	-41.90 [15.17]	1982.02 [1977.02,1994.12]	0.0206	0.0715
IPMIN	12.84 [0.17]	14.28 [0.43]	6.81 [2.99]	16.82 [1.74]	146.78 [111.11]	1970.07 [1962.12,1976.05]	0.00780	0.558
IPUT	18.59 [0.21]	16.18 [0.52]	4.71 [5.15]	18.68 [2.41]	296.23 [435.97]	1970.02 [1960.03,1972.06]	3.47E-010	0.331
IPX	562.31 [1.30]	839.85 [3.10]	1118.51 [96.01]	507.59 [104.83]	-54.62 [10.15]	1980.05 [1978.02,1985.05]	2.33E-006	0.0709
IPXMCA	646.63 [1.24]	907.88 [3.07]	1047.88 [88.13]	496.12 [151.15]	-52.66 [14.96]	1982.02 [1979.04,1990.09]	4.02E-008	0.0664
IPXDCA	778.08 [1.57]	1248.80 [3.76]	1505.65 [125.32]	644.43 [192.23]	-57.20 [13.25]	1982.02 [1979.11,1987.08]	1.29E-010	0.00302
IPXNCA	637.51 [1.31]	857.49 [3.13]	1057.81 [106.77]	677.20 [101.29]	-35.98 [11.55]	1975.03 [1968.02,1987.10]	0.00772	0.0920
IPXMIN	1140.45 [1.85]	1484.20 [4.41]	1805.18 [221.12]	1233.42 [195.45]	-31.67 [13.68]	1975.01 [1968.02,1999.03]	0.112	0.128
IPXUT	1800.85 [2.23]	1551.79 [5.34]	1475.13 [220.59]	2931.61 [935.89]	98.74 [70.06]	1990.12 [1986.08,1996.11]	2.97E-005	0.222
GMPYQ	4.02 [0.10]	5.14 [0.25]	5.85 [0.62]	3.77 [0.86]	-35.57 [16.30]	1981.08 [1973.04,1999.12]	0.00423	0.0694
GMYPQ	3.95 [0.09]	5.01 [0.22]	5.50 [0.50]	4.08 [0.69]	-25.87 [14.32]	1981.08 [1960.04,1999.12]	0.00344	0.0122
(Un)employment								
LHEL	2383.31 [2.20]	2317.78 [5.44]	1808.83 [355.22]	2756.04 [329.63]	52.37 [35.03]	1974.09 [1960.02,1983.09]	0.0773	0.836
LHELX	46.17 [0.32]	55.78 [0.80]	84.09 [10.86]	47.61 [5.83]	-43.38 [10.08]	1970.05 [1967.03,1983.04]	8.35E-005	0.243
LHEM	3.18 [0.09]	3.42 [0.21]	5.85 [0.97]	3.00 [0.40]	-48.82 [10.92]	1965.12 [1963.08,1982.02]	1.32E-013	0.580
LHNAG	2.94 [0.08]	3.39 [0.20]	6.20 [0.82]	2.90 [0.34]	-53.20 [8.28]	1965.12 [1963.10,1971.06]	3.27E-007	0.316
LHUR	183.48 [0.61]	227.96 [1.52]	294.23 [23.57]	123.46 [29.60]	-58.04 [10.61]	1980.05 [1976.11,1984.03]	3.36E-006	0.268
LHU680	552.38 [1.09]	508.38 [2.69]	962.55 [151.96]	428.71 [63.65]	-55.46 [9.65]	1965.12 [1963.03,1973.04]	1.23E-006	0.590
LHU5	58.91 [0.35]	54.62 [0.87]	94.33 [14.56]	45.95 [6.80]	-51.29 [10.42]	1970.02 [1966.07,1978.06]	0.00141	0.623
LHU14	61.25 [0.35]	55.30 [0.87]	68.61 [7.62]	31.45 [10.20]	-54.16 [15.72]	1980.07 [1975.09,1992.04]	9.41E-005	0.485
LHU15	57.63 [0.35]	65.18 [0.86]	77.19 [6.92]	29.85 [11.87]	-61.33 [15.76]	1982.02 [1978.09,1988.05]	0.000103	0.345
LHU26	91.80 [0.42]	84.12 [1.04]	133.17 [18.07]	68.73 [10.12]	-48.39 [10.34]	1970.06 [1965.09,1978.08]	3.03E-006	0.479
LHU27	80.29 [0.41]	80.18 [1.02]	103.13 [11.05]	48.22 [13.05]	-53.25 [13.61]	1980.03 [1976.11,1991.06]	2.09E-012	0.992
LHCH	256.09 [0.81]	184.87 [1.85]	150.27 [54.21]	197.58 [32.85]	31.48 [52.23]	1970.08 [1960.02,1995.02]	0.490	3.30E-005
LPNAG	1.78	2.56	3.32	1.20	-64.02	1980.07	1.06E-006	0.105

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Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
LP	[0.06] 2.07 [0.07]	[0.16] 3.11 [0.17]	[0.25] 3.88 [0.29]	[0.33] 1.54 [0.42]	[10.23] -60.35 [11.14]	[1979.03,1984.07] 1981.09 [1980.07,1986.10]	1.92E-006	0.0679
LPGD	3.58 [0.09]	6.19 [0.23]	7.10 [0.51]	3.50 [0.88]	-50.68 [12.89]	1982.02 [1980.11,1989.10]	2.35E-005	0.00460
LPMI	9.26 [0.16]	15.34 [0.39]	16.95 [1.33]	3.44 [3.62]	-79.70 [21.44]	1982.11 [1980.11,1986.03]	2.44E-005	0.0446
LPCC	9.94 [0.17]	11.62 [0.43]	13.33 [1.76]	6.58 [3.01]	-50.67 [23.49]	1982.02 [1979.03,1999.12]	0.000358	0.281
LPEN	3.19 [0.09]	6.43 [0.23]	7.68 [0.54]	3.87 [0.77]	-49.61 [10.60]	1981.09 [1980.09,1988.09]	0.00443	0.00370
LPED	4.46 [0.12]	8.35 [0.29]	3.29 [1.28]	10.20 [0.78]	210.49 [123.26]	1970.08 [1968.04,1974.10]	1.75E-005	0.00885
LPEN	2.44 [0.08]	4.75 [0.20]	5.68 [0.45]	3.61 [0.50]	-36.32 [10.06]	1975.03 [1971.02,1988.12]	0.0314	0.00733
LPSP	1.47 [0.06]	1.99 [0.14]	2.27 [0.19]	1.37 [0.28]	-39.40 [13.50]	1981.10 [1976.05,1995.04]	0.00348	0.00961
LPTU	4.51 [0.12]	3.93 [0.30]	5.11 [0.97]	2.48 [1.07]	-51.41 [22.89]	1975.03 [1960.02,1999.12]	0.0251	0.471
LPT	2.29 [0.08]	3.06 [0.19]	3.85 [0.36]	1.74 [0.47]	-54.90 [12.93]	1980.06 [1978.09,1990.02]	5.61E-007	0.0618
LPFR	1.87 [0.06]	1.88 [0.14]	2.15 [0.22]	1.51 [0.26]	-30.00 [14.08]	1980.03 [1960.02,1999.12]	0.0123	0.940
LPS	1.92 [0.06]	2.25 [0.16]	1.55 [0.43]	2.45 [0.23]	58.17 [46.28]	1970.05 [1960.02,1979.05]	1.04E-007	0.206
LPGOV	2.22 [0.08]	4.34 [0.21]	4.65 [0.36]	1.13 [1.14]	-75.70 [24.67]	1990.09 [1990.04,1994.09]	6.43E-012	0.000164
LW	113.40 [0.61]	185.44 [1.55]	209.48 [21.13]	123.85 [33.83]	-40.88 [17.22]	1982.03 [1974.05,1998.02]	0.00160	0.0184
LPHRM	232.73 [0.83]	326.53 [2.06]	375.88 [39.57]	169.20 [70.65]	-54.99 [19.38]	1982.03 [1980.03,1996.06]	0.000470	0.128
LPMOSA	131.56 [0.61]	164.37 [1.52]	184.28 [21.06]	88.99 [40.98]	-51.71 [22.91]	1982.05 [1977.01,1999.10]	0.000125	0.177
Wages and salaries								
LEH	2.60 [0.08]	3.82 [0.21]	2.78 [0.62]	4.18 [0.37]	50.39 [35.89]	1974.03 [1965.02,1996.12]	0.000602	0.00542
LEHCC	5.72 [0.12]	8.01 [0.31]	6.43 [0.92]	11.47 [1.36]	78.40 [33.11]	1981.10 [1977.01,1990.11]	4.85E-007	0.0350
LEHM	3.31 [0.09]	5.06 [0.23]	5.75 [0.50]	3.03 [0.86]	-47.32 [15.63]	1982.02 [1978.11,1993.11]	2.95E-011	0.00128
LEHTU	4.44 [0.11]	4.73 [0.27]	2.86 [1.04]	5.52 [0.68]	93.04 [73.92]	1974.05 [1965.02,1991.11]	1.77E-005	0.680
LEHTT	2.88 [0.08]	3.92 [0.21]	4.55 [0.41]	2.85 [0.54]	-37.44 [13.08]	1981.10 [1976.06,1996.07]	0.00436	0.0116
LEHFR	5.66 [0.12]	7.26 [0.31]	3.94 [1.28]	8.67 [0.83]	120.24 [74.53]	1974.05 [1967.06,1978.04]	6.15E-005	0.140
LEHS	3.41 [0.10]	5.11 [0.24]	5.85 [0.53]	3.51 [0.77]	-40.03 [14.28]	1982.01 [1976.11,1995.09]	5.85E-017	0.000228
Construction								
HSFR	86.07 [0.44]	135.78 [1.09]	129.43 [10.02]	214.53 [35.28]	65.74 [30.13]	1990.10 [1988.09,1995.07]	1.54E-011	5.64E-006
HSNE	209.54 [0.67]	299.16 [1.66]	254.64 [31.14]	347.86 [32.57]	36.61 [21.04]	1975.01 [1960.07,1998.01]	0.000114	0.000460
HSMW	177.84 [0.63]	209.29 [1.57]	187.06 [19.97]	683.58 [92.26]	265.44 [62.89]	1990.12 [1990.07,1991.07]	8.24E-013	0.259
HSSOU	105.66 [0.49]	160.13 [1.22]	140.71 [13.62]	227.46 [25.35]	61.66 [23.86]	1982.04 [1976.03,1988.02]	6.15E-012	0.000610
HSWST	138.65 [0.53]	175.47 [1.31]	249.82 [33.06]	159.25 [15.44]	-36.25 [10.46]	1970.02 [1963.09,1979.09]	0.000234	0.0255
HSBR	64.33 [0.39]	98.89 [0.98]	59.39 [12.87]	120.94 [9.62]	103.63 [47.01]	1974.02 [1968.12,1978.08]	0.000831	0.0204
HSBNE	131.11 [0.56]	153.28 [1.48]	173.72 [18.90]	82.55 [35.17]	-52.48 [20.89]	1982.06 [1976.08,1996.02]	1.93E-005	0.347
HSBMW	110.40 [0.54]	157.54 [1.44]	176.41 [17.20]	66.97 [37.68]	-62.04 [21.68]	1982.09 [1976.04,1988.09]	0.00519	0.0930
HSBSOU	82.22 [0.43]	113.94 [1.14]	36.08 [37.43]	119.71 [10.19]	231.79 [345.34]	1970.03 [1965.01,1972.03]	0.000154	0.00426
HSBWST	96.06 [0.48]	140.70 [1.28]	21.36 [46.99]	149.54 [12.79]	600.21 [1541.90]	1970.03 [1966.09,1971.07]	1.95E-007	0.0285
HNS	79.34 [0.43]	123.79 [1.09]	83.82 [13.00]	157.31 [11.91]	87.68 [32.40]	1975.02 [1970.10,1978.09]	1.07E-007	0.0116
HNSNE	210.05 [0.87]	247.45 [2.15]	152.01 [46.24]	319.98 [40.31]	110.50 [69.31]	1980.06 [1974.02,1984.04]	0.00358	0.569
HNSMW	148.54 [0.73]	227.77 [1.80]	213.65 [21.93]	420.69 [81.08]	96.90 [43.00]	1990.12 [1988.11,1993.03]	2.71E-005	0.0214
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Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
HNSSOU	113.06 [0.60]	164.53 [1.48]	188.85 [17.63]	117.50 [24.52]	-37.78 [14.22]	1982.04 [1975.09,1993.01]	1.83E-005	0.0102
HNSWST	138.43 [0.68]	214.21 [1.67]	276.58 [23.46]	124.11 [28.19]	-55.13 [10.88]	1982.01 [1979.05,1985.05]	0.00211	0.0220
HNR	516.66 [1.17]	1054.50 [2.99]	665.22 [96.86]	1380.99 [88.71]	107.60 [33.04]	1975.02 [1972.04,1976.09]	0.0619	0.00267
HMOB	46.77 [0.34]	83.94 [0.85]	101.44 [7.20]	50.46 [9.96]	-50.26 [10.43]	1981.08 [1979.11,1987.10]	0.00111	0.000780
CONTC	16.93 [0.20]	23.69 [0.51]	28.64 [2.69]	17.79 [2.94]	-37.88 [11.79]	1980.05 [1975.02,1994.01]	0.00100	0.0116
CONPC	17.23 [0.21]	22.52 [0.54]	36.78 [4.89]	19.10 [2.39]	-48.06 [9.49]	1970.11 [1968.12,1981.12]	1.11E-007	0.145
CONQC	34.63 [0.29]	46.45 [0.74]	44.20 [4.24]	86.95 [17.99]	96.70 [44.85]	1990.12 [1988.12,1993.10]	6.19E-015	0.0467
CONDO9	110.04 [0.49]	126.56 [1.22]	34.76 [28.43]	146.58 [13.28]	321.75 [347.09]	1970.02 [1965.10,1972.05]	1.20E-010	0.397

Trade

MSMTQ	11.37 [0.15]	11.08 [0.37]	11.56 [1.17]	6.21 [3.74]	-46.29 [32.82]	1990.09 [1984.03,1999.12]	3.98E-042	0.776
MSMQ	15.65 [0.18]	15.75 [0.44]	14.24 [2.32]	17.14 [2.22]	20.40 [25.08]	1974.10 [1960.02,1999.12]	0.0585	0.943
MSDQ	22.68 [0.22]	22.65 [0.53]	22.37 [2.35]	41.16 [19.09]	84.01 [87.52]	1991.02 [1987.08,1996.06]	2.39E-026	0.988
MSNQ	12.63 [0.16]	13.63 [0.40]	10.09 [2.52]	14.93 [1.52]	47.98 [39.87]	1970.08 [1960.02,1992.06]	1.48E-015	0.527
WTQ	16.12 [0.18]	16.47 [0.45]	11.91 [2.97]	18.55 [2.01]	55.79 [42.33]	1970.11 [1960.02,1991.12]	0.0168	0.875
WTDQ	17.72 [0.19]	20.13 [0.47]	22.03 [2.47]	17.78 [2.75]	-19.26 [15.43]	1975.03 [1960.02,1999.12]	0.147	0.268
WTNQ	21.61 [0.22]	24.04 [0.54]	14.83 [4.45]	27.68 [2.80]	86.61 [59.09]	1970.09 [1960.11,1982.10]	7.21E-006	0.501
RTQ	12.85 [0.18]	16.72 [0.44]	10.29 [2.89]	19.45 [1.89]	89.08 [56.26]	1970.10 [1961.09,1980.04]	0.00264	0.0553
RTDQ	27.30 [0.28]	39.22 [0.68]	29.69 [5.76]	46.49 [5.03]	56.56 [34.80]	1974.07 [1960.02,1990.03]	0.000478	0.0116
RTNQ	10.12 [0.15]	11.16 [0.36]	13.37 [1.46]	8.74 [1.53]	-34.62 [13.49]	1975.01 [1964.11,1999.11]	1.47E-012	0.326

Inventories

IVMTQ	4.01 [0.09]	5.68 [0.22]	5.59 [0.42]	11.48 [3.37]	105.49 [62.29]	1991.02 [1990.04,1992.12]	2.56E-025	0.00144
IVMFGQ	4.65 [0.10]	5.82 [0.24]	6.18 [0.51]	3.18 [1.39]	-48.57 [22.93]	1982.11 [1975.05,1991.03]	1.28E-005	0.0455
IVMFDQ	6.30 [0.11]	7.30 [0.28]	8.47 [0.84]	5.85 [0.93]	-30.94 [12.92]	1975.03 [1962.08,1999.07]	0.0300	0.142
IVMFNQ	5.32 [0.10]	6.39 [0.26]	6.67 [0.58]	4.81 [1.38]	-27.93 [21.56]	1982.09 [1962.04,1999.12]	0.000494	0.0456
IVWRQ	7.90 [0.13]	11.93 [0.33]	17.96 [2.24]	10.88 [0.94]	-39.43 [9.19]	1965.12 [1961.12,1972.12]	0.0293	0.0111
IVRRQ	8.30 [0.13]	9.92 [0.33]	10.39 [0.95]	6.48 [2.57]	-37.62 [25.38]	1982.11 [1973.01,1999.12]	1.20E-012	0.107
IVSRQ	16.08 [0.18]	18.03 [0.46]	13.00 [2.49]	22.35 [2.31]	71.93 [37.44]	1974.09 [1962.03,1981.04]	0.0586	0.309
IVSRMQ	24.47 [0.23]	28.16 [0.57]	23.21 [3.78]	32.69 [3.62]	40.82 [27.74]	1974.10 [1960.02,1995.05]	1.32E-007	0.110
IVSRWQ	20.57 [0.20]	21.59 [0.50]	16.11 [2.59]	30.79 [3.36]	91.14 [37.14]	1980.06 [1974.02,1986.04]	1.50E-005	0.725
IVSRRQ	19.51 [0.22]	26.22 [0.55]	15.41 [3.73]	33.98 [3.16]	120.46 [57.21]	1974.06 [1967.08,1977.04]	3.72E-012	0.0854

Orders

MOCMQ	26.68 [0.24]	32.36 [0.59]	21.12 [6.12]	35.32 [3.15]	67.26 [50.71]	1970.04 [1960.08,1987.05]	0.0655	0.158
MDOQ	36.24 [0.27]	46.96 [0.66]	45.38 [3.73]	66.55 [13.14]	46.67 [31.36]	1990.10 [1982.07,1999.12]	1.01E-006	0.0180
MSONDQ	84.18 [0.43]	88.28 [1.07]	74.61 [9.97]	166.19 [23.81]	122.73 [43.65]	1982.09 [1979.07,1985.11]	0.000147	0.761
MO	21.74 [0.21]	27.57 [0.51]	22.05 [3.75]	30.26 [2.62]	37.24 [26.21]	1973.12 [1960.02,1991.09]	6.17E-015	0.0552
MOWU	32.20 [0.25]	41.39 [0.62]	39.97 [3.29]	58.99 [11.57]	47.60 [31.40]	1990.10 [1983.03,1999.09]	1.00E-007	0.00846
MDO	36.35 [0.27]	46.98 [0.66]	45.34 [3.72]	67.32 [13.11]	48.47 [31.38]	1990.10 [1983.04,1999.04]	3.81E-011	0.0174
MDUWU	39.35 [0.28]	49.54 [0.69]	47.53 [4.02]	74.43 [14.14]	56.61 [32.56]	1990.10 [1984.11,1997.05]	3.43E-011	0.0109
MNO	13.19 [0.17]	18.48 [0.42]	21.57 [2.02]	15.29 [2.05]	-29.11 [11.61]	1974.12 [1960.02,1992.01]	0.00733	0.0350

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Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
MNOU	22.17 [0.21]	23.17 [0.52]	24.47 [2.26]	7.03 [7.97]	-71.25 [32.66]	1990.10 [1987.10,1996.05]	4.37E-009	0.686
MU	10.48 [0.15]	14.17 [0.36]	18.63 [1.36]	7.96 [1.61]	-57.30 [9.16]	1980.03 [1978.11,1984.10]	0.00192	0.231
MDU	10.89 [0.15]	14.60 [0.37]	19.18 [1.41]	8.22 [1.66]	-57.12 [9.23]	1980.03 [1978.11,1984.12]	0.00196	0.232
MNU	19.35 [0.21]	26.42 [0.51]	32.44 [2.71]	16.94 [3.41]	-47.78 [11.37]	1980.05 [1977.01,1988.09]	1.73E-005	0.0635
MPCON	84.73 [0.42]	86.96 [1.04]	35.44 [22.76]	96.00 [9.53]	170.85 [176.02]	1965.12 [1960.02,1968.11]	6.77E-006	0.847
MPCONQ	84.31 [0.42]	86.50 [1.03]	78.83 [9.20]	143.08 [24.98]	81.50 [38.11]	1982.11 [1978.04,1989.04]	3.45E-005	0.838

Consumption

GMCQ	6.25 [0.12]	7.70 [0.29]	7.57 [0.68]	16.37 [5.52]	116.11 [75.40]	1991.02 [1990.03,1993.05]	2.90E-054	0.0244
GMCDQ	29.57 [0.27]	42.65 [0.66]	33.18 [5.39]	49.88 [4.71]	50.31 [28.26]	1974.07 [1960.02,1983.01]	1.13E-039	0.00276
GMCNQ	8.27 [0.13]	8.32 [0.32]	13.41 [2.10]	7.32 [0.93]	-45.37 [11.01]	1970.01 [1965.03,1978.11]	2.03E-012	0.957
GMCSQ	3.76 [0.09]	4.09 [0.22]	3.25 [0.60]	4.82 [0.56]	48.41 [32.60]	1974.09 [1960.02,1983.04]	3.12E-016	0.434
GMCANQ	79.47 [0.46]	129.98 [1.14]	122.46 [10.77]	290.26 [49.72]	137.02 [45.64]	1990.12 [1990.07,1992.07]	1.46E-013	0.000783

Money and credit

FM1	5.17 [0.10]	5.46 [0.26]	3.68 [0.74]	7.66 [0.82]	108.38 [47.23]	1975.03 [1967.03,1977.12]	0.149	0.781
FM2	3.39 [0.09]	3.39 [0.21]	3.69 [0.42]	2.37 [0.77]	-35.68 [22.19]	1982.04 [1960.02,1999.12]	5.44E-009	0.996
FM3	3.67 [0.09]	4.33 [0.21]	4.00 [0.39]	7.23 [1.14]	80.94 [33.48]	1990.08 [1985.04,1994.02]	0.000263	0.343
FML	4.90 [0.10]	4.65 [0.24]	4.56 [0.47]	7.44 [2.68]	63.06 [61.14]	1991.01 [1980.04,1997.09]	1.59E-007	0.551
FM2DQ	4.17 [0.09]	5.47 [0.23]	6.32 [0.56]	4.19 [0.68]	-33.67 [12.17]	1980.04 [1966.03,1991.04]	4.23E-005	0.0159
FMFBA	2.97 [0.08]	3.69 [0.19]	6.63 [0.78]	3.17 [0.33]	-52.15 [7.45]	1965.12 [1963.05,1967.12]	7.92E-005	0.231
FMBASE	4.24 [0.10]	4.73 [0.24]	6.18 [1.12]	4.44 [0.50]	-28.21 [15.29]	1970.01 [1960.02,1986.05]	0.0289	0.351
FMRRA	11.48 [0.15]	9.16 [0.36]	8.21 [1.18]	13.11 [2.40]	59.68 [37.14]	1982.06 [1966.07,1995.07]	1.33E-009	0.00589
FMRNBA	16.84 [0.23]	24.42 [0.56]	30.06 [3.20]	14.96 [4.14]	-50.24 [14.77]	1980.06 [1967.12,1985.06]	0.00520	0.119
FMRNBC	15.11 [0.20]	19.82 [0.47]	10.98 [3.94]	22.16 [2.03]	101.82 [74.78]	1970.04 [1960.05,1972.10]	0.0129	0.160
FCLS	3.95 [0.12]	4.51 [0.29]	6.24 [0.82]	3.19 [0.71]	-48.89 [13.22]	1980.06 [1974.02,1986.01]	0.0416	0.465
FCSGV	11.61 [0.19]	14.29 [0.47]	19.05 [1.99]	8.58 [2.18]	-54.94 [12.35]	1981.11 [1979.04,1988.07]	9.60E-006	0.234
FCLRE	4.53 [0.12]	3.53 [0.29]	5.29 [0.84]	2.19 [0.73]	-58.64 [15.26]	1980.06 [1974.02,1986.09]	0.00592	0.222
FCLIN	6.89 [0.14]	5.56 [0.34]	7.46 [1.14]	3.98 [1.04]	-46.64 [16.13]	1980.07 [1974.02,1991.07]	0.112	0.391
FCLNBF	18.98 [0.30]	21.39 [0.62]	30.39 [3.86]	14.56 [3.36]	-52.10 [12.63]	1980.06 [1976.04,1984.03]	0.0656	0.580
FCLNQ	10.41 [0.15]	12.48 [0.37]	7.53 [2.06]	14.44 [1.30]	91.81 [55.33]	1970.09 [1960.08,1973.10]	8.90E-021	0.106
FCLBMC	36358.96 [10.75]	31771.87 [26.65]	25638.89 [6021.33]	94123.89 [19199.13]	267.11 [114.20]	1990.09 [1984.01,1991.03]	5.73E-084	0.586
CCI30M	96.35 [0.52]	82.63 [1.21]	44.78 [16.87]	119.36 [16.62]	166.55 [107.06]	1974.11 [1963.09,1976.07]	0.000166	0.322
CCINT	2821256.34 [120.71]	3015092.81 [316.32]	7727082.72 [2985548.34]	2852610.40 [554402.41]	-63.08 [15.97]	1980.02 [1977.09,1981.01]	1.14E-023	0.758
CCINV	1414322.23 [82.86]	1225510.62 [217.13]	907148.77 [306322.41]	1968354.92 [467915.21]	116.98 [89.60]	1982.10 [1976.02,1986.07]	0.00134	0.512

Stock prices

FSNCOM	34.87 [0.28]	63.59 [0.70]	47.81 [6.18]	74.91 [5.23]	56.67 [23.01]	1974.06 [1967.03,1980.06]	0.000818	1.79E-005
FSNIN	36.08 [0.32]	71.06 [0.79]	52.45 [8.32]	79.65 [5.65]	51.87 [26.39]	1974.06 [1967.02,1981.06]	0.0195	3.81E-007
FSNTR	53.08 [0.36]	91.29 [0.89]	92.75 [5.98]	9.37 [44.73]	-89.90 [48.23]	1991.02 [1990.03,1992.09]	1.48E-045	6.75E-010
FSNUT	33.41 [0.28]	55.56 [0.69]	67.25 [4.80]	41.61 [5.24]	-38.12 [8.96]	1980.05 [1977.02,1987.07]	1.62E-016	0.000410
FSNFI	48.28 [0.36]	87.87 [0.88]	77.80 [6.36]	129.99 [13.01]	67.08 [21.60]	1982.08 [1979.09,1985.12]	0.0113	0.000162

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Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
FSPCOM	34.47 [0.28]	61.50 [0.70]	45.79 [6.06]	72.79 [5.14]	58.97 [23.85]	1974.06 [1967.05,1980.03]	0.00326	1.97E-005
FSPIN	35.02 [0.28]	62.76 [0.71]	46.08 [6.22]	74.73 [5.27]	62.16 [24.69]	1974.06 [1967.09,1979.09]	0.00209	1.61E-005
FSPCAP	41.19 [0.31]	71.19 [0.77]	50.16 [7.35]	86.30 [6.23]	72.04 [28.09]	1974.06 [1968.04,1978.08]	1.75E-019	1.71E-005
FSPTR	51.90 [0.38]	89.33 [0.98]	90.97 [6.57]	15.55 [44.06]	-82.90 [48.45]	1991.02 [1989.12,1993.02]	4.52E-039	3.48E-010
FSPUT	34.75 [0.27]	57.76 [0.67]	31.61 [8.66]	63.46 [4.04]	100.75 [56.44]	1970.02 [1965.08,1973.07]	2.89E-008	0.00373
FSPFI	52.15 [0.39]	98.50 [0.99]	82.93 [7.45]	148.03 [13.28]	78.50 [22.66]	1982.08 [1980.01,1984.07]	0.000596	5.01E-005

Dividends and volume

FSDXP	36.55 [0.30]	65.62 [0.73]	45.54 [7.78]	74.79 [5.25]	64.22 [30.32]	1970.11 [1963.01,1975.10]	0.000445	3.22E-005
FSPXE	43.72 [0.31]	66.39 [0.76]	54.36 [7.34]	75.02 [6.22]	38.00 [21.88]	1974.06 [1960.02,1985.04]	3.27E-007	1.87E-005
FSNVV3	36.91 [0.41]	45.00 [1.11]	76.94 [10.17]	20.16 [8.97]	-73.79 [12.17]	1982.01 [1981.06,1988.06]	5.41E-007	0.505

Interest rates

FYFF	379.27 [1.33]	1008.33 [3.30]	457.62 [145.42]	1315.71 [108.64]	187.51 [94.40]	1974.02 [1969.03,1974.09]	0.00840	0.00383
FYCP	393.14 [1.30]	1004.33 [3.11]	364.10 [126.89]	1361.67 [94.80]	273.99 [132.91]	1974.02 [1971.05,1974.05]	0.0130	0.00871
FYGM3	331.99 [1.18]	916.30 [2.92]	531.92 [90.06]	1390.36 [100.02]	161.38 [48.08]	1975.03 [1972.04,1975.10]	0.0311	0.0118
FYGM6	344.52 [1.12]	872.30 [2.78]	518.66 [81.38]	1308.46 [90.38]	152.28 [43.25]	1975.03 [1972.06,1975.11]	0.0288	0.0142
FYGT1	382.92 [1.14]	891.81 [2.82]	519.45 [83.97]	1351.06 [93.25]	160.09 [45.72]	1975.03 [1972.07,1975.10]	0.0275	0.0231
FYGT5	325.24 [0.95]	627.67 [2.35]	366.57 [58.13]	949.69 [64.56]	159.07 [44.70]	1975.03 [1972.08,1975.11]	0.0713	0.0277
FYGT10	275.66 [0.87]	519.15 [2.17]	262.73 [49.54]	816.92 [53.38]	210.94 [62.05]	1975.02 [1973.01,1975.08]	0.0101	0.0350
FYAAAC	203.43 [0.79]	410.26 [1.96]	178.80 [39.18]	695.73 [43.51]	289.12 [88.67]	1975.03 [1973.08,1975.06]	0.00799	0.0515
FYBAAC	197.93 [0.74]	349.17 [1.84]	184.45 [35.40]	552.32 [39.32]	199.44 [61.30]	1975.03 [1972.10,1975.09]	0.000495	0.0471
FWAFIT	321.74 [1.27]	493.11 [2.69]	731.97 [77.44]	356.61 [58.54]	-51.28 [9.51]	1980.03 [1979.02,1985.05]	4.82E-008	0.0144
FYFHA	266.74 [0.94]	509.26 [2.32]	220.67 [56.14]	865.19 [62.35]	292.07 [103.67]	1975.03 [1973.02,1975.07]	0.00833	0.0936

Exchange rates

EXRUS	19.88 [0.25]	26.93 [0.71]	25.47 [2.88]	72.27 [16.05]	183.78 [70.75]	1991.02 [1990.06,1991.12]	3.70E-115	0.00401
EXRGER	31.50 [0.30]	34.61 [0.86]	31.62 [4.14]	127.44 [23.04]	303.06 [89.96]	1991.02 [1990.09,1991.07]	3.22E-147	0.452
EXRSW	34.70 [0.33]	41.89 [0.94]	38.76 [0.94]	138.68 [27.77]	257.77 [85.15]	1991.02 [1990.09,1991.09]	7.89E-052	0.255
EXRJAN	32.13 [0.32]	41.90 [0.93]	40.67 [4.94]	80.04 [27.50]	96.80 [71.71]	1991.02 [1987.09,1993.11]	7.92E-029	0.0151
EXRUK	29.37 [0.30]	30.36 [0.88]	27.77 [4.38]	110.56 [24.37]	298.13 [107.89]	1991.02 [1990.06,1991.08]	1.50E-265	0.816
EXRCAN	12.65 [0.19]	12.32 [0.54]	14.42 [1.81]	3.24 [3.77]	-77.50 [26.32]	1990.09 [1986.07,1994.11]	7.26E-018	0.878

Producer prices

PWFSA	4.75 [0.11]	8.16 [0.27]	10.08 [0.83]	6.30 [0.82]	-37.51 [9.60]	1974.11 [1969.11,1985.09]	1.05E-006	0.0118
PWFCSA	5.71 [0.12]	8.86 [0.30]	8.56 [0.72]	18.59 [4.12]	117.17 [51.49]	1991.01 [1990.05,1993.01]	9.68E-009	0.0278
PWIMSA	5.09 [0.12]	11.63 [0.30]	6.72 [1.29]	13.87 [0.87]	106.49 [41.57]	1970.11 [1966.06,1971.06]	0.000187	0.0178
PWCMSA	20.62 [0.25]	32.80 [0.61]	24.79 [3.05]	91.88 [8.28]	270.57 [56.51]	1982.11 [1982.04,1983.07]	2.45E-010	0.203
PWFXSA	4.79 [0.12]	8.69 [0.30]	8.21 [0.67]	21.77 [3.50]	165.07 [47.70]	1991.01 [1990.10,1991.11]	3.84E-029	0.00184
PW160A	19.02 [0.24]	21.16 [0.69]	41.77 [5.17]	14.29 [2.98]	-65.79 [8.30]	1980.07 [1979.02,1983.04]	0.000730	0.695
PW150A	18.25 [0.25]	17.16 [0.72]	23.21 [4.41]	12.45 [3.89]	-46.36 [19.60]	1982.01 [1975.10,1999.12]	0.000274	0.713
PW561	47.45 [0.42]	84.52 [1.03]	55.50 [8.42]	298.47 [22.86]	437.75 [91.36]	1982.11 [1982.02,1982.12]	9.78E-035	0.154
PWCM	6.06 [0.12]	8.44 [0.29]	10.46 [0.87]	4.80 [1.17]	-54.13 [11.82]	1980.07 [1978.09,1988.02]	0.195	0.204

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Series	σ_E	σ_0	σ_1	σ_2	$\Delta\sigma$	τ_v	p-value _v	p-value _{nl}
PWXFA	4.89 [0.13]	11.39 [0.31]	10.35 [0.74]	18.80 [1.99]	81.70 [23.25]	1990.08 [1989.10,1992.10]	1.88E-009	0.00183
PSM99Q	16.96 [0.19]	19.55 [0.47]	7.97 [3.20]	24.84 [2.17]	211.91 [128.40]	1970.11 [1966.05,1972.07]	0.0127	0.546
PSCCOM	21.32 [0.22]	23.04 [0.55]	11.74 [4.31]	28.19 [2.91]	140.17 [91.65]	1970.11 [1962.01,1973.03]	0.0757	0.707
PSCFOO	31.17 [0.27]	36.18 [0.68]	19.15 [6.69]	43.96 [4.52]	129.51 [83.55]	1970.11 [1961.02,1972.05]	0.00334	0.496
PSCMAT	22.82 [0.21]	25.48 [0.53]	30.28 [2.84]	16.89 [3.80]	-44.23 [13.61]	1980.07 [1973.02,1990.12]	1.53E-005	0.554
PZFR	20.74 [0.26]	22.62 [0.76]	0.06 [17.09]	23.40 [3.17]	42023.01 [12955994.32]	1980.02 [1977.07,1985.11]	4.60E-018	0.390
PCGOLD	47.11 [0.47]	81.38 [1.36]	98.33 [11.46]	25.67 [20.76]	-73.90 [21.34]	1990.08 [1989.05,1995.11]	3.25E-007	0.0173

Consumer prices

PUNEW	2.88 [0.08]	4.86 [0.20]	3.78 [0.59]	5.36 [0.40]	41.62 [24.66]	1970.11 [1960.02,1977.04]	5.52E-005	0.00233
PU81	4.35 [0.12]	5.77 [0.30]	7.86 [1.02]	4.25 [0.87]	-45.85 [13.18]	1974.12 [1972.11,1999.12]	0.138	0.192
PUH	2.57 [0.10]	6.14 [0.23]	4.18 [0.57]	7.90 [0.54]	89.16 [29.03]	1975.03 [1972.05,1978.03]	0.00620	4.42E-005
PU83	4.13 [0.10]	3.55 [0.24]	2.55 [0.78]	4.08 [0.56]	59.77 [53.34]	1974.01 [1960.02,1983.08]	2.75E-017	0.350
PU84	6.23 [0.12]	9.28 [0.31]	8.57 [0.79]	24.52 [3.63]	186.22 [49.84]	1990.12 [1990.07,1991.11]	2.04E-049	0.0242
PU85	3.06 [0.08]	3.78 [0.19]	7.81 [0.74]	3.07 [0.31]	-60.73 [5.46]	1965.12 [1964.06,1966.04]	5.16E-009	0.323
PUC	3.80 [0.09]	5.69 [0.23]	5.48 [0.45]	12.30 [2.58]	124.37 [50.62]	1991.01 [1990.06,1992.09]	3.38E-021	0.0102
PUCD	3.45 [0.09]	5.60 [0.22]	8.66 [1.02]	5.06 [0.43]	-41.52 [8.46]	1965.12 [1962.02,1969.08]	0.00916	0.0260
PUS	3.15 [0.08]	5.18 [0.21]	4.08 [0.48]	6.46 [0.52]	58.18 [22.71]	1975.02 [1964.10,1977.02]	0.550	0.0230
PUXF	2.94 [0.08]	5.18 [0.20]	6.97 [0.88]	4.87 [0.37]	-30.11 [10.24]	1965.12 [1960.02,1967.05]	1.13E-008	0.000834
PUXHS	3.17 [0.08]	4.57 [0.21]	5.34 [0.46]	3.50 [0.54]	-34.46 [11.60]	1980.03 [1971.02,1993.06]	4.40E-011	0.0294
PUXM	3.13 [0.08]	4.96 [0.21]	3.55 [0.60]	5.66 [0.42]	59.46 [29.46]	1973.12 [1963.11,1979.04]	0.000769	0.00612
GMDC	2.32 [0.07]	3.85 [0.18]	4.49 [0.33]	2.96 [0.39]	-34.10 [9.91]	1980.03 [1974.03,1990.11]	5.86E-006	0.00471
GMDCD	3.05 [0.09]	5.14 [0.22]	6.33 [0.49]	3.49 [0.58]	-44.87 [10.07]	1980.03 [1977.04,1987.12]	0.232	0.0135
GMDCN	3.68 [0.09]	5.81 [0.23]	3.98 [0.80]	6.64 [0.54]	66.70 [36.10]	1970.11 [1960.02,1973.12]	1.09E-010	0.0118
GMDCS	2.05 [0.07]	3.07 [0.17]	5.31 [0.57]	2.68 [0.24]	-49.54 [7.01]	1965.12 [1963.05,1967.01]	2.08E-005	0.0261

Miscellaneous

PMI	2750.39 [2.42]	3227.47 [5.99]	3760.97 [344.52]	1879.68 [547.59]	-50.02 [15.26]	1981.12 [1976.04,1990.12]	0.00181	0.326
PMP	3995.41 [3.00]	4444.99 [7.43]	4963.61 [495.32]	2067.97 [1060.41]	-58.34 [21.76]	1982.07 [1976.02,1990.11]	7.08E-005	0.425
PMNO	4304.39 [3.11]	4473.74 [7.72]	5354.78 [571.69]	2247.93 [908.66]	-58.02 [17.55]	1981.12 [1977.05,1991.12]	0.00112	0.810
PMDEL	3408.64 [3.05]	5474.82 [7.56]	6434.91 [553.19]	3218.62 [848.02]	-49.98 [13.86]	1981.11 [1980.05,1992.08]	4.82E-008	0.00824
PMNV	3699.79 [2.80]	3966.89 [6.94]	4530.26 [463.56]	2543.65 [736.80]	-43.85 [17.25]	1981.12 [1974.04,1997.10]	5.84E-009	0.573
PMEMP	3091.45 [2.55]	3189.88 [6.32]	3709.86 [396.97]	2126.28 [567.75]	-42.69 [16.49]	1981.09 [1972.10,1998.05]	2.56E-020	0.764
PMCP	4535.85 [3.23]	5037.54 [8.00]	4469.32 [547.86]	9907.97 [1603.97]	121.69 [45.02]	1990.08 [1988.09,1993.11]	2.24E-005	0.475
HHSNTN	3752.69 [3.03]	4899.70 [7.51]	4457.10 [434.85]	34111.10 [3532.71]	665.32 [108.89]	1991.02 [1990.12,1991.03]	7.70E-320	0.248
F6EDM	102.93 [0.50]	89.48 [1.27]	87.37 [12.22]	207.70 [91.47]	137.73 [109.86]	1991.02 [1989.09,1994.07]	2.75E-060	0.115
FTMC6	116.71 [0.54]	146.58 [1.31]	361.99 [97.47]	142.74 [13.02]	-60.57 [11.21]	1970.01 [1968.11,1970.05]	1.20E-036	0.0594
FTMM6	76.72 [0.45]	84.90 [1.14]	114.58 [24.46]	79.34 [10.59]	-30.75 [17.43]	1970.09 [1965.02,1999.12]	0.0289	0.457

Results for SupW tests for structural change in unconditional volatility during recessions for individual series, when allowing for nonlinearity and structural change during expansions in the unconditional mean. The columns headed σ_E and σ_0 contain estimates of the unconditional standard deviation during expansions and recessions under the null hypothesis, respectively. Columns headed σ_1 and σ_2 contain estimates of the unconditional standard deviation during recessions before and after the break, respectively. The column headed $\Delta\sigma$ contains the percent change in standard deviation. The estimated volatility break date is given in the column headed τ_v , with the 90% confidence interval given in brackets. The column headed p-value_v contains the asymptotic p -value of the corresponding SupW test. The column headed p-value_{nl} contains the asymptotic p -value of the Wald test for nonlinearity in unconditional volatility. Figures in brackets below parameter estimates are standard errors.

Table A.13: Tests for multiple structural changes in conditional variance - assuming constant unconditional mean

Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
Production								
IP	1	10.76 [0.47]	1984.03 [1983.10,1990.03]	5.96 [0.58]				
IPP	1	9.44 [0.37]	1992.07 [1991.10,1997.12]	5.70 [0.77]				
IPF	1	10.41 [0.46]	1984.02 [1981.02,1996.04]	7.65 [0.57]				
IPC	1	12.03 [0.55]	1983.10 [1981.11,1993.08]	8.55 [0.66]				
IPCD	0							
IPCN	1	9.42 [0.36]	1990.02 [1987.02,1998.05]	7.23 [0.62]				
IPE	1	14.75 [0.59]	1992.04 [1989.12,1996.06]	9.47 [1.20]				
IPI	1	11.44 [0.47]	1992.06 [1991.12,1996.02]	6.38 [0.97]				
IPM	1	14.67 [0.62]	1984.03 [1983.12,1988.02]	7.03 [0.77]				
IPMD	1	21.01 [0.93]	1984.01 [1983.11,1988.11]	10.40 [1.14]				
IPMND	1	15.15 [0.73]	1984.04 [1983.11,1999.12]	9.67 [0.91]				
IPMFG	1	11.75 [0.53]	1984.01 [1983.08,1991.08]	6.59 [0.65]				
IPD	1	15.33 [0.73]	1984.01 [1983.04,1991.11]	9.06 [0.89]				
IPN	1	9.47 [0.39]	1991.06 [1991.04,1998.02]	5.43 [0.75]				
IPMIN	1	14.66 [0.69]	1986.11 [1984.01,1997.07]	10.62 [0.99]				
IPUT	2	9.15 [1.87]	1967.02 [1964.05,1967.07]	16.55 [1.25]	1982.11 [1971.11,1984.04]	23.95 [1.20]		
IPX	1	910.85 [45.31]	1984.03 [1983.11,1989.09]	487.03 [45.91]				
IPXMCA	1	943.28 [41.97]	1984.01 [1983.08,1990.08]	526.86 [51.53]				
IPXDCA	1	1236.27 [66.73]	1984.01 [1983.04,1989.05]	684.13 [66.91]				
IPXNCA	1	827.25 [37.48]	1990.01 [1989.10,1995.10]	473.67 [55.82]				
IPXMIN	1	1397.76 [74.63]	1986.06 [1984.10,1993.05]	948.83 [87.17]				
IPXUT	1	1423.52 [121.02]	1982.11 [1971.11,1984.05]	2047.16 [112.77]				
GMPYQ	1	5.09 [0.25]	1984.12 [1981.05,1998.06]	3.80 [0.32]				
GMYPQ	0							
(Un)Employment								
LHEL	1	1719.51 [163.46]	1974.05 [1971.03,1975.03]	2990.13 [122.35]				
LHELX	1	69.24 [3.55]	1975.01 [1974.03,1985.01]	42.48 [2.75]				
LHEM	1	4.02 [0.18]	1984.08 [1983.06,1990.06]	2.55 [0.23]				
LHNAG	1	3.76 [0.16]	1984.08 [1982.07,1990.03]	2.55 [0.20]				
LHUR	3	254.44 [21.74]	1965.12 [1964.05,1967.12]	147.45 [17.97]	1974.08 [1972.02,1975.06]	283.77 [16.80]	1984.07 [1983.11,1987.05]	156.78 [13.47]
LHU680	2	764.38 [55.71]	1966.02 [1965.08,1968.05]	395.48 [46.45]	1974.11 [1965.09,1977.05]	555.80 [27.44]		
LHU5	1	75.25 [4.54]	1970.04 [1966.08,1978.04]	53.42 [2.67]				
LHU14	1	78.43 [3.77]	1975.01 [1972.12,1983.07]	55.40 [2.92]				
LHU15	1	78.64 [3.70]	1976.06 [1974.09,1984.01]	53.90 [3.09]				
LHU26	1	120.79 [6.34]	1971.02 [1967.09,1974.12]	84.61 [3.93]				
LHU27	1	110.76 [4.92]	1976.07 [1975.07,1980.07]	66.76 [4.13]				

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Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
LHCH	0							
LPNAG	1	3.13 [0.12]	1984.07 [1982.12,1988.04]	1.40 [0.15]				
LP	1	3.62 [0.15]	1984.06 [1983.04,1989.01]	1.63 [0.18]				
LPGD	1	6.46 [0.28]	1984.06 [1983.12,1988.12]	2.70 [0.35]				
LPMI	2	7.63 [0.79]	1974.03 [1969.07,1974.11]	16.40 [0.84]	1986.09 [1986.05,1990.11]	7.11 [0.82]		
LPCC	1	13.93 [0.72]	1984.06 [1983.11,1989.05]	6.74 [0.90]				
LPEM	1	6.22 [0.28]	1984.04 [1984.01,1989.07]	2.34 [0.35]				
LPED	1	8.34 [0.39]	1984.07 [1984.03,1990.02]	3.35 [0.50]				
LPEN	1	4.29 [0.19]	1984.04 [1984.03,1986.11]	1.72 [0.24]				
LPSP	1	2.06 [0.07]	1992.03 [1991.11,1994.10]	0.90 [0.15]				
LPTU	1	5.99 [0.38]	1979.06 [1974.01,1986.07]	3.62 [0.37]				
LPT	1	3.32 [0.15]	1984.11 [1982.01,1991.03]	2.01 [0.19]				
LPFR	1	1.16 [0.19]	1966.01 [1960.10,1966.02]	2.38 [0.08]				
LPS	1	2.33 [0.09]	1992.03 [1991.07,1996.05]	1.30 [0.17]				
LPGOV	1	3.12 [0.16]	1990.12 [1990.10,1997.01]	1.67 [0.29]				
LW	0							
LPHRM	1	298.32 [16.58]	1984.05 [1983.04,1991.03]	166.71 [20.71]				
LPMOSA	1	156.68 [9.71]	1982.06 [1977.08,1995.12]	106.54 [10.99]				
Wages and salaries								
LEH	2	3.01 [0.30]	1970.09 [1965.07,1972.10]	4.14 [0.17]	1987.09 [1987.05,1989.11]	2.36 [0.21]		
LEHCC	1	7.11 [0.34]	1988.04 [1984.11,1996.12]	4.70 [0.53]				
LEHM	2	3.50 [0.32]	1970.08 [1966.02,1972.05]	5.56 [0.30]	1982.02 [1981.03,1985.02]	3.05 [0.24]		
LEHTU	1	5.87 [0.32]	1981.08 [1979.01,1989.09]	4.19 [0.31]				
LEHTT	1	3.84 [0.17]	1987.06 [1986.08,1991.05]	2.45 [0.23]				
LEHFR	2	4.60 [0.56]	1971.02 [1969.03,1971.11]	8.29 [0.32]	1989.06 [1989.04,1990.04]	2.70 [0.43]		
LEHS	1	4.79 [0.20]	1987.12 [1987.07,1992.03]	2.80 [0.28]				
Construction								
HSFR	1	103.93 [4.62]	1985.03 [1979.02,1992.02]	74.15 [6.04]				
HSNE	0							
HSMW	0							
HSSOU	0							
HSWST	0							
HSBR	2	51.75 [7.41]	1966.01 [1960.06,1968.01]	82.70 [3.62]	1991.03 [1990.10,1994.08]	42.74 [6.13]		
HSBNE	1	153.69 [7.53]	1984.03 [1981.03,1994.10]	104.60 [9.14]				
HSBMW	1	131.20 [6.33]	1990.03 [1989.03,1995.10]	71.41 [10.95]				
HSBSOU	2	74.27 [6.44]	1972.04 [1967.07,1973.07]	112.87 [6.92]	1982.01 [1977.11,1987.12]	79.55 [5.10]		
HSBWST	0							
HNS	0							
HNSNE	2	175.48 [21.26]	1981.06 [1974.02,1983.09]	251.40 [15.12]	1996.02 [1995.08,1999.12]	152.81 [29.58]		

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Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
HNSMW	0							
HNSSOU	1	147.63 [8.31]	1984.11 [1982.03,1990.03]	101.39 [7.04]				
HNSWST	0							
HNR	1	636.22 [29.29]	1992.03 [1990.01,1999.12]	430.23 [55.84]				
HMOB	2	69.70 [3.03]	1980.09 [1979.11,1988.04]	43.45 [3.94]	1992.12 [1991.07,1997.02]	27.97 [5.21]		
CONTC	1	22.00 [1.03]	1984.02 [1982.08,1989.03]	14.23 [1.13]				
CONPC	1	23.08 [1.09]	1984.05 [1983.03,1990.09]	14.75 [1.22]				
CONQC	2	30.46 [3.51]	1971.06 [1966.07,1972.09]	47.23 [2.54]	1983.09 [1981.12,1988.04]	30.15 [2.21]		
CONDO9	1	70.66 [10.91]	1966.12 [1962.08,1967.08]	122.31 [5.00]				
Trade								
MSMTQ	1	12.86 [0.49]	1992.09 [1991.08,1999.05]	8.76 [1.03]				
MSMQ	0							
MSDQ	1	25.29 [1.02]	1992.01 [1990.05,1999.12]	18.12 [2.04]				
MSNQ	0							
WTQ	1	18.39 [0.77]	1987.02 [1985.04,1992.07]	12.01 [1.12]				
WTDQ	2	14.32 [1.84]	1965.12 [1960.12,1967.11]	21.25 [0.85]	1993.04 [1992.04,1996.07]	12.68 [1.73]		
WTNQ	2	25.59 [1.16]	1982.07 [1979.04,1997.09]	19.61 [1.63]	1994.01 [1993.04,1998.06]	13.25 [2.27]		
RTQ	1	15.67 [0.73]	1987.02 [1986.05,1993.02]	9.18 [1.05]				
RTDQ	1	33.20 [1.62]	1991.02 [1990.12,1995.10]	15.93 [3.03]				
RTNQ	1	13.40 [0.53]	1980.04 [1979.08,1982.11]	7.33 [0.53]				
Inventories								
IVMTQ	1	5.08 [0.21]	1984.08 [1983.08,1994.06]	3.43 [0.27]				
IVMFGQ	1	5.61 [0.24]	1986.01 [1984.06,1996.01]	3.91 [0.33]				
IVMFDQ	1	7.58 [0.31]	1986.02 [1983.12,1992.09]	5.12 [0.42]				
IVMFNQ	1	6.28 [0.24]	1986.12 [1985.09,1991.06]	4.15 [0.35]				
IVVRQ	1	9.95 [0.41]	1984.12 [1983.10,1989.03]	6.24 [0.53]				
IVRRQ	1	9.86 [0.41]	1988.01 [1985.09,1994.04]	6.67 [0.63]				
IVSRQ	1	18.02 [0.72]	1992.09 [1991.07,1999.03]	12.18 [1.52]				
IVSRMQ	1	27.28 [1.11]	1993.07 [1992.05,1999.12]	19.38 [2.52]				
IVSRWQ	2	17.43 [1.41]	1971.08 [1965.11,1974.02]	24.64 [1.03]	1993.05 [1992.03,1998.04]	16.83 [1.87]		
IVSRRQ	1	21.81 [1.00]	1993.04 [1992.05,1999.12]	13.95 [2.24]				
Orders								
MOCMQ	1	30.55 [1.23]	1991.08 [1990.08,1997.10]	20.19 [2.40]				
MDOQ	1	40.37 [1.55]	1993.03 [1991.07,1999.12]	28.96 [3.43]				
MSONDQ	1	51.99 [7.60]	1967.12 [1963.02,1968.09]	94.43 [3.78]				
MO	1	24.14 [0.91]	1993.07 [1992.02,1999.08]	17.16 [2.09]				
MOWU	1	35.59 [1.33]	1993.07 [1991.04,1999.12]	25.93 [3.03]				
MDO	1	40.24 [1.53]	1993.03 [1991.09,1999.10]	28.84 [3.40]				
MDUWU	0							

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Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
MNO	2	11.42 [0.96]	1972.05 [1970.03,1973.08]	19.69 [1.09]	1982.01 [1980.02,1985.05]	13.22 [0.80]		
MNOU	0							
MU	1	15.25 [0.58]	1979.04 [1978.08,1990.12]	9.36 [0.56]				
MDU	1	15.81 [0.59]	1979.04 [1978.09,1990.01]	9.62 [0.57]				
MNU	1	25.22 [1.07]	1984.03 [1982.11,1996.10]	16.62 [1.32]				
MPCON	2	54.05 [7.10]	1967.12 [1965.11,1968.03]	115.49 [5.91]	1979.05 [1975.05,1985.05]	81.57 [4.40]		
MPCONQ	1	56.76 [7.17]	1967.12 [1962.03,1968.08]	92.46 [3.57]				

Consumption

GMCQ	1	7.39 [0.32]	1987.02 [1985.09,1993.10]	4.87 [0.46]				
GMCDQ	1	34.66 [1.53]	1991.04 [1990.12,1999.12]	21.29 [2.90]				
GMCNQ	1	9.56 [0.38]	1987.03 [1985.06,1990.07]	6.01 [0.55]				
GMCSQ	2	2.76 [0.28]	1971.11 [1967.12,1972.08]	4.79 [0.21]	1993.06 [1992.03,1999.04]	3.15 [0.38]		
GMCANQ	1	95.12 [4.55]	1991.06 [1991.02,1999.12]	57.98 [8.74]				

Money and credit

FM1	1	3.88 [0.30]	1979.03 [1975.08,1979.08]	7.33 [0.29]				
FM2	1	2.18 [0.31]	1969.03 [1962.05,1969.08]	4.35 [0.17]				
FM3	1	2.38 [0.30]	1968.10 [1962.10,1969.03]	4.84 [0.16]				
FML	1	4.86 [0.21]	1989.12 [1983.07,1992.10]	6.52 [0.39]				
FM2DQ	0							
FMFBA	0							
FMBASE	0							
FMRRRA	1	10.17 [0.54]	1985.01 [1977.05,1987.08]	14.23 [0.69]				
FMRNBA	1	10.47 [2.12]	1968.01 [1967.12,1968.01]	20.66 [1.06]				
FMRNBC	2	13.52 [0.98]	1977.07 [1973.06,1978.03]	24.30 [1.33]	1987.02 [1986.06,1990.06]	12.48 [1.31]		
FCLS	0							
FCSGV	0							
FCLRE	0							
FCLIN	0							
FCLNBF	0							
FCLNQ	1	8.40 [0.80]	1970.09 [1961.03,1976.03]	12.05 [0.49]				
FCLBMC	2	4208.43 [3726.08]	1969.12 [1969.06,1969.12]	31291.82 [2686.01]	1989.01 [1985.08,1989.04]	72270.61 [3551.32]		
CCI30M	1	48.62 [6.86]	1974.10 [1972.11,1975.01]	127.29 [5.76]				
CCINT	1	681203.76 [420470.00]	1979.11 [1979.10,1979.11]	3340000.45 [206888.87]				
CCINV	1	546717.00 [145085.18]	1982.08 [1981.01,1982.10]	1815622.29 [102916.92]				

Stock prices

FSNCOM	1	41.80 [1.79]	1991.02 [1987.06,1998.06]	29.11 [3.36]				
FSNIN	1	46.28 [2.18]	1991.03 [1989.10,1995.10]	28.80 [3.62]				
FSNTR	1	64.74 [2.73]	1991.02 [1989.03,1995.04]	43.72 [4.51]				
FSNUT	1	47.42 [2.65]	1976.01 [1973.12,1981.05]	33.58 [1.63]				

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Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
FSNFI	0							
FSPCOM	0							
FSPIN	1	41.43 [1.81]	1991.03 [1986.06,1999.12]	30.41 [3.42]				
FSPCAP	0							
FSPTR	1	62.45 [2.92]	1991.02 [1988.08,1996.10]	45.10 [4.40]				
FSPUT	0							
FSPFI	0							

Dividends and volume

FSDXP	0							
FSPXE	0							
FSNVV3	2	65.70 [3.78]	1982.01 [1981.04,1984.04]	34.36 [3.97]	1988.05 [1987.07,1992.06]	19.97 [3.30]		

Interest rates

FYFF	3	427.86 [47.50]	1979.01 [1974.10,1979.04]	1267.27 [85.12]	1984.12 [1984.11,1985.01]	332.29 [75.19]	1992.07 [1991.12,1994.06]	150.15 [76.03]
FYCP	3	354.86 [44.28]	1977.04 [1973.09,1977.06]	1232.66 [77.84]	1982.11 [1982.09,1985.02]	485.48 [71.23]	1989.07 [1988.10,1992.03]	252.82 [64.69]
FYGM3	3	185.74 [51.03]	1969.05 [1967.05,1969.09]	483.77 [48.90]	1979.07 [1975.04,1979.08]	1143.89 [64.10]	1985.06 [1985.05,1985.07]	225.40 [40.94]
FYGM6	3	146.54 [55.81]	1966.06 [1965.01,1966.09]	449.00 [39.08]	1979.07 [1976.08,1979.08]	1084.98 [58.12]	1985.06 [1985.05,1985.07]	250.75 [37.13]
FYGT1	2	363.35 [32.77]	1979.07 [1976.07,1979.08]	1167.98 [59.49]	1985.06 [1985.05,1985.07]	308.40 [38.00]		
FYGT5	1	160.61 [34.93]	1969.08 [1964.12,1969.09]	439.96 [19.63]				
FYGT10	3	85.82 [32.15]	1966.06 [1965.05,1966.09]	247.81 [22.37]	1979.09 [1978.03,1979.10]	673.27 [31.54]	1986.05 [1986.02,1988.03]	305.95 [22.09]
FYAAAC	3	41.88 [24.94]	1966.05 [1965.04,1966.06]	158.22 [17.19]	1979.09 [1978.10,1979.10]	582.01 [24.62]	1986.03 [1985.12,1987.05]	224.44 [16.93]
FYBAAC	3	39.08 [23.05]	1966.02 [1964.08,1966.03]	160.91 [15.43]	1979.09 [1978.04,1979.10]	491.01 [22.16]	1986.04 [1986.01,1988.04]	222.73 [15.38]
FWAFIT	1	525.16 [29.17]	1983.01 [1982.08,1984.10]	240.24 [26.09]				
FYFHA	3	27.65 [38.55]	1965.12 [1965.05,1965.12]	188.21 [25.36]	1979.08 [1977.12,1979.09]	725.62 [38.55]	1985.07 [1985.03,1988.05]	327.59 [24.69]

Exchange rates

EXRUS	2	12.94 [2.12]	1979.09 [1978.07,1980.10]	25.10 [1.26]	1992.11 [1989.07,1995.11]	18.04 [1.72]		
EXRGER	2	22.32 [3.00]	1980.02 [1978.03,1981.06]	37.57 [1.89]	1992.11 [1990.07,1997.06]	27.88 [2.74]		
EXRSW	0							
EXRJAN	0							
EXRUK	1	34.15 [1.64]	1993.04 [1992.12,1995.08]	17.63 [2.72]				
EXRCAN	0							

Producer prices

PWFSA	0							
PWFCSA	0							
PWIMSA	1	3.80 [0.54]	1972.10 [1972.09,1972.10]	7.07 [0.37]				
PWCMSA	1	13.21 [1.99]	1972.10 [1969.12,1972.10]	26.91 [1.36]				
PWFXSA	1	2.92 [0.75]	1973.01 [1970.03,1973.01]	6.43 [0.32]				
PW160A	1	27.78 [1.70]	1981.02 [1979.12,1983.08]	17.50 [0.97]				
PW150A	1	28.79 [1.71]	1982.01 [1981.04,1984.06]	16.27 [1.07]				
PW561	1	26.59 [3.72]	1986.01 [1983.09,1986.02]	109.77 [5.08]				

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Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
PWCM	0							
PWXFA	1	3.32 [0.88]	1972.11 [1972.10,1972.11]	6.92 [0.37]				
PSM99Q	2	13.20 [1.22]	1972.02 [1969.10,1972.05]	27.61 [1.41]	1981.02 [1979.08,1986.01]	17.90 [0.97]		
PSCCOM	2	15.44 [1.58]	1972.11 [1970.12,1972.12]	41.45 [2.33]	1978.10 [1978.03,1982.01]	22.10 [1.23]		
PSCFOO	2	20.74 [2.38]	1972.11 [1971.11,1972.12]	63.86 [3.51]	1978.10 [1978.05,1981.11]	31.44 [1.86]		
PSCMAT	2	18.61 [1.57]	1972.09 [1970.01,1973.01]	36.50 [1.93]	1981.02 [1979.05,1986.01]	23.64 [1.29]		
PZFR	1	34.02 [2.59]	1980.10 [1979.04,1984.01]	21.43 [1.29]				
PCGOLD	1	85.22 [5.98]	1983.03 [1982.11,1985.07]	37.92 [3.91]				
Consumer prices								
PUNEW	3	3.92 [0.30]	1966.02 [1965.09,1967.02]	2.23 [0.28]	1973.01 [1972.12,1973.01]	6.20 [0.25]	1981.09 [1981.06,1984.11]	2.44 [0.17]
PU81	2	4.13 [0.65]	1972.12 [1969.12,1973.01]	9.19 [0.62]	1978.06 [1978.03,1981.06]	3.95 [0.31]		
PUH	0							
PU83	1	3.21 [0.21]	1986.01 [1983.08,1986.11]	6.09 [0.29]				
PU84	0							
PU85	2	4.37 [0.16]	1983.03 [1982.10,1984.06]	1.72 [0.23]	1993.10 [1992.07,1994.12]	3.24 [0.30]		
PUC	2	3.00 [0.30]	1972.12 [1970.04,1973.01]	6.87 [0.38]	1981.02 [1979.12,1984.12]	3.72 [0.25]		
PUCD	2	3.25 [0.26]	1974.03 [1970.01,1974.10]	6.95 [0.34]	1982.06 [1982.01,1986.06]	3.18 [0.23]		
PUS	2	4.69 [0.19]	1982.12 [1982.11,1983.01]	1.60 [0.28]	1993.06 [1992.09,1993.12]	2.87 [0.35]		
PUXF	1	4.33 [0.18]	1983.04 [1982.07,1996.08]	2.39 [0.21]				
PUXHS	3	3.83 [0.33]	1966.06 [1965.11,1968.11]	2.43 [0.33]	1972.12 [1971.12,1972.12]	5.92 [0.29]	1981.03 [1980.09,1984.08]	2.76 [0.19]
PUXM	3	3.95 [0.33]	1965.12 [1965.06,1967.04]	2.18 [0.30]	1973.01 [1972.03,1973.01]	6.29 [0.27]	1981.09 [1981.05,1984.10]	2.59 [0.19]
GMDC	0							
GMDCD	0							
GMDCN	3	3.69 [0.43]	1965.12 [1965.05,1968.05]	2.26 [0.40]	1972.12 [1972.11,1972.12]	6.93 [0.37]	1981.03 [1980.05,1986.08]	3.83 [0.24]
GMDCS	3	2.27 [0.13]	1973.11 [1972.03,1975.11]	4.50 [0.16]	1982.10 [1982.08,1983.09]	1.36 [0.16]	1992.04 [1990.09,1992.08]	2.65 [0.18]
Miscellaneous								
PMI	1	3303.85 [140.41]	1984.09 [1983.03,1990.05]	2112.61 [178.58]				
PMP	1	4660.92 [213.64]	1984.08 [1983.05,1993.09]	3139.88 [270.50]				
PMNO	0							
PMDEL	1	4960.85 [232.52]	1981.11 [1981.04,1984.06]	2289.74 [255.49]				
PMNV	1	4348.97 [197.94]	1981.12 [1978.08,1987.10]	3051.19 [218.42]				
PMEMP	1	3555.49 [145.78]	1988.01 [1986.10,1993.03]	2297.49 [223.46]				
PMCP	0							
HHSNTN	1	2226.73 [236.65]	1978.02 [1976.04,1979.05]	5318.52 [215.37]				
F6EDM	0							
FTMC6	1	139.19 [5.88]	1991.06 [1990.11,1996.12]	84.89 [11.78]				
FTMM6	1	97.69 [4.77]	1987.03 [1986.11,1991.02]	51.08 [6.29]				

Results for tests for multiple structural changes in unconditional volatility for individual series, when assuming a constant unconditional mean. The column headed m contains the number of detected changes using the sequential procedure of Bai and Perron (1998). Columns headed σ_j , $j = 1, \dots, 4$ contains the estimate of the unconditional standard deviation between the $(j-1)$ st and j th break. Figures in brackets below these estimates are standard errors. The estimated break date for the j -th change is given in the column headed $\tau_{v,j}$, with the 90% confidence interval for the break date given in brackets.

Table A.14: Tests for multiple structural changes in conditional variance - allowing for structural change in the unconditional mean

Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
Production								
IP	1	10.62 [0.46]	1984.03 [1983.10,1991.01]	6.05 [0.58]				
IPP	1	9.37 [0.37]	1992.07 [1991.09,1998.02]	5.73 [0.76]				
IPF	1	10.29 [0.45]	1984.04 [1981.01,1997.05]	7.64 [0.57]				
IPC	1	11.84 [0.54]	1984.01 [1982.01,1995.01]	8.53 [0.67]				
IPCD	0							
IPCN	1	9.24 [0.36]	1990.02 [1986.11,1999.04]	7.12 [0.63]				
IPE	1	14.74 [0.58]	1992.04 [1990.10,1995.06]	8.85 [1.20]				
IPI	1	11.35 [0.46]	1992.06 [1991.12,1996.03]	6.49 [0.96]				
IPM	1	14.73 [0.61]	1984.03 [1984.01,1987.05]	6.55 [0.76]				
IPMD	1	21.16 [0.92]	1984.02 [1983.12,1987.09]	9.26 [1.13]				
IPMND	1	15.07 [0.72]	1984.04 [1983.11,1999.12]	9.64 [0.89]				
IPMFG	1	11.60 [0.53]	1984.01 [1983.08,1992.05]	6.63 [0.65]				
IPD	1	15.43 [0.72]	1984.01 [1983.04,1989.11]	8.43 [0.88]				
IPN	1	9.38 [0.40]	1990.01 [1989.10,1997.09]	5.60 [0.69]				
IPMIN	1	14.54 [0.69]	1986.11 [1983.09,1997.06]	10.55 [0.99]				
IPUT	2	8.70 [1.86]	1967.02 [1964.09,1967.05]	16.41 [1.24]	1982.11 [1972.03,1984.03]	23.91 [1.19]		
IPX	1	905.28 [44.80]	1984.03 [1983.10,1989.03]	482.58 [45.39]				
IPXMCA	1	943.31 [41.73]	1984.01 [1983.06,1989.12]	521.83 [51.24]				
IPXDCA	1	1229.67 [65.89]	1984.01 [1983.01,1988.11]	688.42 [66.06]				
IPXNCA	1	823.37 [36.83]	1990.01 [1989.09,1995.04]	477.61 [54.85]				
IPXMIN	1	1385.76 [74.64]	1986.06 [1984.08,1993.12]	950.75 [87.17]				
IPXUT	1	1430.99 [120.26]	1982.11 [1971.08,1984.04]	2048.02 [112.06]				
GMPYQ	0							
GMYXPQ	2	3.77 [0.31]	1972.05 [1967.12,1973.10]	6.06 [0.30]	1984.12 [1983.04,1990.09]	4.06 [0.28]		
(Un)Employment								
LHEL	2	1491.00 [196.30]	1969.05 [1966.05,1969.10]	2671.11 [120.75]	1994.01 [1990.04,1997.03]	3739.81 [246.55]		
LHELX	1	68.26 [3.49]	1975.01 [1974.03,1984.12]	43.08 [2.71]				
LHEM	1	4.01 [0.18]	1984.08 [1983.08,1990.03]	2.49 [0.23]				
LHNAG	1	3.69 [0.16]	1984.08 [1982.10,1991.04]	2.55 [0.20]				
LHUR	3	262.39 [20.56]	1965.12 [1964.12,1967.12]	156.07 [16.99]	1974.08 [1972.01,1975.03]	281.42 [15.88]	1984.07 [1983.10,1987.06]	165.97 [12.74]
LHU680	2	765.14 [53.44]	1966.06 [1965.11,1968.07]	392.95 [46.89]	1974.10 [1966.05,1977.04]	556.35 [26.98]		
LHU5	1	75.40 [4.52]	1970.04 [1966.09,1978.02]	53.40 [2.66]				
LHU14	1	78.38 [3.76]	1975.01 [1972.12,1983.01]	55.11 [2.92]				
LHU15	1	78.61 [3.70]	1976.06 [1974.09,1982.11]	52.84 [3.09]				
LHU26	1	121.13 [6.30]	1971.02 [1967.10,1974.10]	84.34 [3.91]				
LHU27	1	103.98 [4.38]	1980.11 [1979.11,1985.02]	63.14 [4.58]				

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Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
LHCH	0							
LPNAG	1	3.00 [0.12]	1984.11 [1983.12,1990.06]	1.49 [0.16]				
LP	1	3.65 [0.14]	1984.06 [1983.06,1988.05]	1.55 [0.18]				
LPGD	1	6.26 [0.28]	1984.07 [1984.03,1990.08]	2.80 [0.35]				
LPMI	2	8.45 [0.75]	1974.09 [1967.10,1975.12]	14.81 [0.83]	1986.09 [1986.05,1991.10]	7.40 [0.79]		
LPCC	1	13.95 [0.72]	1984.06 [1983.11,1988.07]	6.09 [0.90]				
LPEM	1	6.09 [0.28]	1984.07 [1984.05,1989.09]	2.29 [0.35]				
LPED	1	8.07 [0.40]	1984.07 [1984.04,1991.07]	3.34 [0.50]				
LPEN	1	4.18 [0.19]	1984.04 [1984.03,1986.02]	1.68 [0.24]				
LPSP	1	1.98 [0.07]	1992.03 [1991.09,1994.06]	0.91 [0.15]				
LPTU	1	6.00 [0.38]	1979.06 [1974.05,1985.07]	3.46 [0.37]				
LPT	1	3.25 [0.15]	1984.11 [1983.07,1991.01]	1.84 [0.19]				
LPFR	1	1.44 [0.17]	1965.12 [1960.02,1966.11]	2.07 [0.07]				
LPS	2	1.88 [0.15]	1970.02 [1963.08,1971.02]	2.86 [0.13]	1983.03 [1982.06,1987.03]	1.62 [0.12]		
LPGOV	1	2.83 [0.15]	1990.10 [1990.09,1992.06]	1.09 [0.28]				
LW	1	152.45 [8.81]	1984.05 [1981.03,1992.06]	94.48 [9.82]				
LPHRM	1	304.96 [17.17]	1982.04 [1981.03,1990.07]	180.13 [19.27]				
LPMOSA	0							

Wages and salaries

LEH	1	3.41 [0.14]	1986.12 [1986.09,1988.07]	1.51 [0.18]				
LEHCC	0							
LEHM	1	4.47 [0.21]	1982.06 [1981.01,1985.06]	2.36 [0.24]				
LEHTU	1	5.64 [0.27]	1984.03 [1983.08,1987.09]	3.03 [0.29]				
LEHTT	1	3.45 [0.15]	1987.06 [1986.07,1990.07]	2.08 [0.20]				
LEHFR	2	4.89 [0.55]	1971.03 [1968.11,1971.12]	8.26 [0.32]	1989.06 [1989.04,1990.03]	2.31 [0.42]		
LEHS	1	4.51 [0.18]	1989.02 [1988.12,1990.09]	1.54 [0.27]				

Construction

HSFR	1	104.17 [4.60]	1985.03 [1979.03,1992.02]	74.21 [6.00]				
HSNE	0							
HSMW	0							
HSSOU	0							
HSWST	0							
HSBR	2	52.22 [7.39]	1966.01 [1960.04,1968.01]	82.61 [3.61]	1991.03 [1990.10,1994.07]	42.36 [6.12]		
HSBNE	1	153.63 [7.52]	1984.03 [1981.03,1995.01]	104.80 [9.12]				
HSBMW	1	131.31 [6.28]	1990.05 [1989.05,1995.10]	71.34 [10.98]				
HSBSOU	1	91.34 [3.97]	1991.02 [1987.11,1999.12]	70.13 [7.32]				
HSBWST	0							
HNS	0							
HNSNE	0							

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Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
HNSMW	0							
HNSSOU	1	147.95 [8.32]	1984.11 [1982.05,1989.11]	100.47 [7.05]				
HNSWST	0							
HNR	1	637.74 [29.10]	1992.03 [1990.02,1999.12]	430.67 [55.48]				
HMOB	2	67.93 [3.04]	1980.09 [1979.12,1990.03]	43.46 [3.95]	1992.12 [1991.05,1997.11]	29.67 [5.22]		
CONTC	1	21.96 [1.01]	1984.06 [1983.01,1989.02]	14.06 [1.13]				
CONPC	1	23.17 [1.09]	1984.05 [1983.04,1990.01]	14.45 [1.21]				
CONQC	2	30.86 [3.50]	1971.06 [1966.01,1972.10]	46.95 [2.53]	1983.09 [1982.01,1988.08]	30.25 [2.20]		
CONDO9	1	70.89 [10.89]	1966.12 [1962.08,1967.08]	122.27 [4.98]				
Trade								
MSMTQ	1	12.83 [0.49]	1992.09 [1991.08,1998.06]	8.43 [1.03]				
MSMQ	0							
MSDQ	1	25.30 [1.02]	1992.01 [1990.08,1998.11]	17.12 [2.05]				
MSNQ	0							
WTQ	1	18.38 [0.77]	1987.02 [1985.03,1992.05]	12.03 [1.11]				
WTDQ	2	14.37 [1.82]	1965.12 [1960.11,1967.12]	21.21 [0.85]	1993.04 [1992.03,1996.07]	12.70 [1.72]		
WTNQ	2	25.62 [1.16]	1982.07 [1979.03,1997.03]	19.61 [1.62]	1994.01 [1993.02,1998.04]	13.13 [2.26]		
RTQ	1	15.68 [0.73]	1987.02 [1986.06,1992.08]	8.90 [1.05]				
RTDQ	1	33.24 [1.61]	1991.02 [1990.12,1995.06]	15.38 [3.03]				
RTNQ	1	13.26 [0.53]	1980.04 [1979.07,1983.01]	7.35 [0.54]				
Inventories								
IVMTQ	1	4.94 [0.20]	1984.10 [1983.08,1995.02]	3.44 [0.26]				
IVMFGQ	1	5.42 [0.23]	1986.01 [1984.04,1996.03]	3.87 [0.31]				
IVMFDQ	1	7.46 [0.30]	1984.10 [1983.01,1992.06]	5.19 [0.38]				
IVMFNQ	2	4.99 [0.33]	1973.07 [1967.10,1974.12]	7.14 [0.33]	1986.12 [1986.05,1990.01]	4.19 [0.34]		
IVVRQ	1	9.89 [0.41]	1984.12 [1983.12,1989.05]	6.18 [0.52]				
IVRRQ	1	9.81 [0.41]	1988.01 [1985.10,1994.10]	6.71 [0.62]				
IVSRQ	1	17.94 [0.72]	1992.09 [1991.05,1998.04]	11.69 [1.53]				
IVSRMQ	1	27.19 [1.10]	1993.07 [1992.06,1999.12]	19.04 [2.52]				
IVSRWQ	2	17.24 [1.41]	1971.08 [1966.02,1973.12]	24.60 [1.03]	1993.05 [1992.03,1998.01]	16.58 [1.87]		
IVSRRQ	1	21.78 [1.00]	1993.04 [1992.03,1999.12]	13.77 [2.23]				
Orders								
MOCMQ	1	30.50 [1.23]	1991.08 [1990.08,1997.10]	20.24 [2.40]				
MDOQ	1	40.25 [1.54]	1993.03 [1991.05,1999.12]	29.17 [3.42]				
MSONDQ	1	51.02 [7.61]	1967.12 [1963.04,1968.09]	94.35 [3.78]				
MO	1	24.11 [0.91]	1993.07 [1991.12,1999.12]	17.36 [2.07]				
MOWU	1	35.44 [1.33]	1993.06 [1991.02,1999.12]	26.34 [3.01]				
MDO	1	40.23 [1.53]	1993.03 [1991.07,1999.12]	29.13 [3.38]				
MDUWU	0							

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Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
MNO	0							
MNOU	0							
MU	1	14.90 [0.56]	1979.04 [1978.11,1987.12]	8.62 [0.54]				
MDU	1	15.42 [0.58]	1979.04 [1978.11,1987.01]	8.80 [0.56]				
MNU	1	25.05 [1.06]	1984.10 [1983.08,1995.11]	15.85 [1.35]				
MPCON	2	53.88 [7.09]	1967.12 [1965.11,1968.03]	115.46 [5.91]	1979.05 [1975.05,1985.07]	81.53 [4.40]		
MPCONQ	1	55.74 [7.18]	1967.12 [1962.07,1968.08]	92.38 [3.57]				

Consumption

GMCQ	1	7.33 [0.32]	1987.02 [1985.10,1993.10]	4.82 [0.46]				
GMCDQ	1	34.56 [1.53]	1991.04 [1990.12,1999.12]	21.44 [2.90]				
GMCNQ	1	9.57 [0.38]	1987.03 [1985.08,1990.06]	5.93 [0.55]				
GMCSQ	2	2.74 [0.25]	1974.09 [1971.01,1975.05]	4.91 [0.22]	1993.06 [1992.06,1998.06]	3.08 [0.38]		
GMCANQ	1	94.94 [4.54]	1991.06 [1991.02,1999.12]	58.10 [8.74]				

Money and credit

FM1	1	4.10 [0.29]	1979.03 [1972.05,1980.05]	6.35 [0.28]				
FM2	1	1.90 [0.34]	1966.03 [1960.06,1967.08]	3.65 [0.15]				
FM3	1	2.13 [0.34]	1966.04 [1960.02,1968.03]	4.01 [0.14]				
FML	0							
FM2DQ	2	2.78 [0.33]	1969.02 [1967.04,1969.05]	6.56 [0.35]	1977.01 [1973.08,1981.03]	4.25 [0.21]		
FMFBA	0							
FMBASE	1	3.57 [0.24]	1979.09 [1972.05,1983.09]	4.86 [0.23]				
FMRRRA	0							
FMRNBA	2	15.06 [1.38]	1977.07 [1964.09,1978.01]	28.47 [1.76]	1988.05 [1988.04,1991.06]	12.50 [1.70]		
FMRNBC	2	13.49 [0.99]	1977.07 [1972.11,1978.03]	23.69 [1.33]	1987.02 [1986.05,1991.03]	12.89 [1.31]		
FCLS	0							
FCSGV	1	15.04 [0.76]	1987.03 [1986.04,1993.01]	9.01 [0.78]				
FCLRE	0							
FCLIN	0							
FCLNBF	0							
FCLNQ	1	7.52 [0.81]	1969.12 [1963.03,1971.06]	11.88 [0.47]				
FCLBMC	2	4249.23 [3720.17]	1969.12 [1969.05,1969.12]	31242.72 [2681.75]	1989.01 [1985.07,1989.04]	72327.01 [3545.69]		
CCI30M	1	48.69 [6.83]	1974.10 [1972.12,1975.01]	127.27 [5.73]				
CCINT	1	696125.04 [418269.64]	1979.11 [1979.10,1979.11]	3349354.97 [205806.20]				
CCINV	1	546931.48 [144921.68]	1982.08 [1981.01,1982.10]	1813784.94 [102800.94]				

Stock prices

FSNCOM	1	42.04 [1.75]	1991.02 [1987.10,1997.07]	28.95 [3.28]				
FSNIN	1	46.32 [2.14]	1991.02 [1989.11,1995.05]	28.60 [3.53]				
FSNTR	1	63.57 [2.74]	1991.02 [1988.11,1995.07]	43.19 [4.52]				
FSNUT	1	45.50 [2.62]	1976.01 [1973.04,1982.09]	33.26 [1.61]				

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Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
FSNFI	0							
FSPCOM	0							
FSPIN	1	41.38 [1.77]	1991.02 [1987.06,1999.12]	30.35 [3.32]				
FSPCAP	0							
FSPTR	1	62.06 [2.93]	1991.02 [1988.05,1997.01]	44.99 [4.41]				
FSPUT	0							
FSPFI	0							

Dividends and volume

FSDXP	0							
FSPXE	0							
FSNVV3	2	65.81 [3.73]	1982.01 [1981.05,1984.04]	34.19 [3.92]	1988.05 [1987.08,1991.12]	19.26 [3.26]		

Interest rates

FYFF	3	428.13 [47.35]	1979.01 [1974.11,1979.05]	1248.81 [84.86]	1984.12 [1984.11,1985.01]	346.24 [83.12]	1991.02 [1989.12,1993.10]	194.86 [69.45]
FYCP	2	359.44 [40.55]	1979.08 [1976.12,1979.10]	1280.00 [74.30]	1985.06 [1985.05,1986.03]	309.98 [51.45]		
FYGM3	3	195.99 [49.32]	1969.11 [1967.09,1970.04]	492.60 [49.74]	1979.07 [1974.04,1979.08]	1135.95 [63.58]	1985.06 [1985.05,1985.07]	234.94 [40.61]
FYGM6	3	148.07 [55.99]	1966.05 [1964.10,1966.09]	446.65 [38.83]	1979.07 [1976.02,1979.08]	1076.23 [57.92]	1985.06 [1985.05,1985.07]	252.72 [37.00]
FYGT1	2	363.22 [32.82]	1979.07 [1976.06,1979.08]	1151.03 [59.59]	1985.06 [1985.05,1985.07]	308.35 [38.06]		
FYGT5	3	162.94 [31.66]	1969.08 [1967.01,1970.03]	346.38 [30.87]	1979.09 [1977.02,1979.11]	799.12 [40.30]	1985.08 [1985.06,1988.02]	345.02 [25.89]
FYGT10	3	97.00 [32.35]	1966.06 [1965.01,1966.10]	242.90 [22.51]	1979.09 [1978.03,1979.10]	656.48 [31.74]	1986.05 [1986.02,1988.04]	303.05 [22.24]
FYAAAC	3	65.19 [24.55]	1966.07 [1964.12,1966.09]	157.83 [17.30]	1979.08 [1978.09,1979.09]	580.19 [25.73]	1985.07 [1985.03,1986.09]	230.80 [16.48]
FYBAAC	3	81.30 [21.42]	1966.12 [1964.01,1967.03]	161.78 [15.78]	1979.09 [1978.02,1979.10]	464.54 [21.95]	1986.04 [1985.12,1988.08]	224.24 [15.24]
FWAFIT	1	528.20 [28.57]	1983.01 [1982.09,1984.08]	228.56 [25.55]				
FYFHA	3	101.65 [29.32]	1969.12 [1964.03,1970.02]	217.84 [29.70]	1979.08 [1977.09,1979.10]	704.10 [37.96]	1985.07 [1985.02,1988.08]	332.16 [24.32]

Exchange rates

EXRUS	1	13.44 [2.15]	1979.09 [1977.04,1981.12]	22.23 [1.03]				
EXRGER	0							
EXRSW	0							
EXRJAN	0							
EXRUK	1	33.67 [1.62]	1993.04 [1992.12,1995.08]	17.80 [2.67]				
EXRCAN	0							

Producer prices

PWFSA	1	6.35 [0.30]	1981.04 [1978.01,1989.07]	4.00 [0.33]				
PWFCSA	1	6.78 [0.30]	1991.03 [1990.06,1998.06]	3.94 [0.57]				
PWIMSA	0							
PWCMSA	1	13.74 [1.98]	1972.10 [1969.09,1972.10]	26.51 [1.36]				
PWFXSA	0							
PW160A	1	26.34 [1.73]	1981.02 [1979.09,1984.11]	17.25 [0.99]				
PW150A	1	28.14 [1.67]	1982.01 [1981.02,1984.05]	16.34 [1.05]				
PW561	2	11.16 [4.97]	1973.02 [1970.07,1973.02]	29.23 [5.00]	1986.01 [1983.11,1986.04]	103.28 [4.82]		

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Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
PWCM	1	7.90 [0.36]	1981.04 [1980.07,1990.05]	4.53 [0.38]				
PWXFA	0							
PSM99Q	2	13.88 [1.21]	1972.02 [1969.03,1972.06]	26.42 [1.40]	1981.02 [1978.12,1986.11]	17.72 [0.97]		
PSCCOM	2	16.33 [1.53]	1972.11 [1970.04,1972.12]	37.04 [1.90]	1981.02 [1980.08,1984.08]	19.66 [1.26]		
PSCFOO	2	21.82 [2.32]	1972.11 [1971.05,1972.12]	61.89 [3.42]	1978.10 [1978.05,1981.08]	30.07 [1.81]		
PSCMAT	2	19.48 [1.53]	1972.09 [1969.07,1973.02]	35.44 [1.88]	1981.02 [1979.04,1985.07]	22.23 [1.26]		
PZFR	0							
PCGOLD	1	81.72 [5.74]	1983.03 [1982.10,1985.07]	37.25 [3.76]				
Consumer prices								
PUNEW	2	2.00 [0.20]	1973.01 [1972.03,1973.01]	5.39 [0.22]	1983.04 [1982.11,1988.02]	2.78 [0.17]		
PU81	2	7.06 [0.41]	1979.02 [1978.10,1982.09]	3.47 [0.36]	1993.07 [1991.12,1999.01]	2.37 [0.54]		
PUH	2	3.80 [0.23]	1978.04 [1975.04,1979.03]	6.94 [0.34]	1983.01 [1982.12,1983.06]	1.58 [0.18]		
PU83	1	3.25 [0.20]	1986.01 [1982.07,1986.11]	5.57 [0.28]				
PU84	0							
PU85	3	2.92 [0.18]	1971.09 [1967.11,1972.04]	4.68 [0.18]	1983.03 [1983.01,1984.06]	1.56 [0.19]	1993.07 [1992.12,1993.09]	4.00 [0.25]
PUC	1	4.46 [0.19]	1991.03 [1990.09,1998.07]	2.70 [0.36]				
PUCD	1	4.75 [0.18]	1984.05 [1984.02,1989.08]	2.41 [0.23]				
PUS	2	4.26 [0.17]	1982.12 [1982.11,1983.01]	1.94 [0.25]	1993.06 [1992.12,1993.11]	3.55 [0.32]		
PUXF	1	2.38 [0.22]	1973.06 [1973.05,1973.06]	3.83 [0.16]				
PUXHS	2	2.61 [0.22]	1972.12 [1971.07,1972.12]	5.43 [0.27]	1981.03 [1980.04,1986.06]	3.11 [0.18]		
PUXM	2	2.48 [0.20]	1973.07 [1972.07,1973.07]	5.69 [0.24]	1982.12 [1982.06,1987.06]	2.93 [0.18]		
GMDC	3	1.31 [0.14]	1973.02 [1972.06,1973.02]	4.62 [0.18]	1981.03 [1980.12,1984.07]	2.02 [0.15]	1992.07 [1991.06,1994.01]	3.35 [0.19]
GMDCD	1	4.07 [0.20]	1981.06 [1980.07,1993.02]	2.62 [0.21]				
GMDCN	1	4.30 [0.19]	1991.03 [1990.08,1999.12]	2.74 [0.36]				
GMDCS	3	1.14 [0.12]	1973.11 [1972.08,1973.12]	3.93 [0.15]	1982.01 [1981.11,1983.08]	1.58 [0.14]	1992.04 [1991.05,1992.08]	3.31 [0.16]
Miscellaneous								
PMI	1	3296.01 [140.33]	1984.09 [1983.02,1990.04]	2114.36 [178.47]				
PMP	1	4647.99 [213.87]	1984.08 [1983.04,1993.10]	3134.65 [270.81]				
PMNO	0							
PMDEL	1	4935.14 [232.49]	1981.11 [1981.04,1984.07]	2304.28 [255.46]				
PMNV	1	4347.65 [197.54]	1981.12 [1978.08,1987.10]	3060.25 [217.97]				
PMEMP	1	3551.04 [145.58]	1988.01 [1986.09,1993.03]	2300.66 [223.15]				
PMCP	0							
HHSNTN	1	2215.68 [235.35]	1978.02 [1976.04,1979.03]	5321.04 [214.18]				
F6EDM	1	137.76 [9.65]	1972.04 [1971.02,1978.09]	91.23 [4.94]				
FTMC6	2	89.92 [9.95]	1973.02 [1968.07,1973.11]	150.47 [6.66]	1991.02 [1990.08,1995.04]	87.60 [10.75]		
FTMM6	1	95.33 [4.47]	1987.03 [1986.09,1991.02]	52.83 [5.89]				

Results for tests for multiple structural changes in unconditional volatility for individual series, when allowing for a single structural change in the unconditional mean. The column headed m contains the number of detected changes using the sequential procedure of Bai and Perron (1998). Columns headed σ_j , $j = 1, \dots, 4$ contains the estimate of the unconditional standard deviation between the $(j-1)$ st and j th break. Figures in brackets below these estimates are standard errors. The estimated break date for the j -th change is given in the column headed $\tau_{v,j}$, with the 90% confidence interval for the break date given in brackets.

Table A.15: Tests for multiple structural changes in conditional variance - allowing for nonlinearity in unconditional mean

Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
Production								
IP	1	8.88 [0.39]	1986.06 [1985.07,1991.06]	5.42 [0.54]				
IPP	1	8.42 [0.33]	1992.07 [1990.06,1998.11]	5.84 [0.69]				
IPF	1	9.04 [0.36]	1992.07 [1988.09,1999.12]	6.74 [0.76]				
IPC	1	11.68 [0.56]	1980.09 [1977.08,1992.02]	8.78 [0.58]				
IPCD	0							
IPCN	1	9.27 [0.35]	1990.02 [1986.04,1999.12]	7.36 [0.61]				
IPE	1	13.51 [0.53]	1992.04 [1989.02,1996.04]	9.00 [1.10]				
IPI	1	10.75 [0.41]	1992.06 [1991.09,1995.07]	6.41 [0.86]				
IPM	1	12.34 [0.52]	1986.03 [1985.10,1989.05]	6.49 [0.72]				
IPMD	1	18.07 [0.83]	1984.01 [1983.09,1989.02]	9.61 [1.01]				
IPMND	1	13.95 [0.65]	1984.12 [1983.08,1999.12]	9.86 [0.84]				
IPMFG	1	9.86 [0.45]	1984.01 [1982.06,1990.11]	6.34 [0.56]				
IPD	1	13.13 [0.63]	1984.01 [1982.04,1990.11]	8.33 [0.78]				
IPN	1	8.88 [0.36]	1990.06 [1989.12,1996.10]	5.83 [0.65]				
IPMIN	1	14.46 [0.69]	1986.11 [1983.07,1999.12]	10.79 [0.99]				
IPUT	2	9.14 [1.86]	1967.02 [1964.05,1967.06]	16.59 [1.25]	1982.11 [1971.12,1984.05]	24.00 [1.20]		
IPX	1	748.65 [39.39]	1984.03 [1983.03,1989.06]	471.42 [39.91]				
IPXMCA	1	808.22 [36.68]	1984.01 [1982.10,1990.02]	513.27 [45.05]				
IPXDCA	1	1048.74 [58.09]	1984.01 [1982.03,1989.07]	677.05 [58.24]				
IPXNCA	1	769.00 [34.08]	1990.01 [1989.08,1994.04]	474.95 [50.76]				
IPXMIN	1	1381.07 [73.87]	1986.06 [1984.09,1994.05]	951.22 [86.28]				
IPXUT	1	1424.41 [120.44]	1982.11 [1971.12,1984.05]	2050.84 [112.23]				
GMPYQ	1	4.50 [0.21]	1994.01 [1991.07,1999.12]	3.20 [0.49]				
GMYPQ	0							
(Un)Employment								
LHEL	1	1960.92 [105.51]	1986.10 [1984.06,1987.10]	3303.03 [150.39]				
LHELX	1	63.86 [3.77]	1970.05 [1968.02,1978.08]	41.86 [2.23]				
LHEM	0							
LHNAG	0							
LHUR	3	253.97 [17.49]	1965.12 [1965.07,1967.11]	134.83 [15.28]	1973.09 [1970.05,1974.02]	234.88 [12.07]	1986.02 [1984.12,1991.02]	154.73 [11.44]
LHU680	1	763.82 [55.74]	1966.02 [1963.03,1970.08]	509.65 [23.63]				
LHU5	3	79.91 [5.73]	1966.01 [1961.06,1974.02]	58.93 [3.21]	1985.02 [1984.02,1988.07]	32.71 [4.79]	1993.09 [1992.01,1994.02]	70.91 [5.61]
LHU14	1	72.87 [3.62]	1975.08 [1972.10,1984.10]	52.59 [2.90]				
LHU15	1	77.61 [4.22]	1970.12 [1968.04,1974.11]	52.00 [2.59]				
LHU26	1	116.38 [6.18]	1971.02 [1967.08,1975.01]	81.21 [3.83]				
LHU27	1	108.01 [4.81]	1975.11 [1974.11,1979.01]	62.58 [3.90]				

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Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
LHCH	0							
LPNAG	2	2.50 [0.10]	1980.07 [1977.07,1984.10]	1.65 [0.13]	1993.03 [1992.02,1998.09]	0.99 [0.18]		
LP	1	2.82 [0.11]	1984.02 [1982.07,1987.01]	1.45 [0.14]				
LPGD	2	5.05 [0.22]	1984.02 [1981.04,1991.11]	3.41 [0.36]	1992.09 [1991.07,1997.04]	1.96 [0.39]		
LPMI	2	7.49 [0.80]	1973.10 [1969.04,1974.06]	16.29 [0.83]	1986.09 [1986.05,1990.11]	7.12 [0.82]		
LPCC	1	13.99 [0.81]	1978.06 [1977.09,1984.05]	7.07 [0.75]				
LPEM	1	4.77 [0.22]	1984.03 [1982.01,1991.05]	2.76 [0.27]				
LPED	1	6.44 [0.33]	1984.03 [1981.05,1993.01]	3.79 [0.41]				
LPEN	1	3.95 [0.19]	1977.04 [1976.04,1984.07]	2.29 [0.17]				
LPSP	2	1.93 [0.08]	1981.10 [1973.06,1990.10]	1.51 [0.11]	1993.04 [1991.12,1998.08]	0.97 [0.14]		
LPTU	1	5.68 [0.38]	1979.06 [1974.02,1986.02]	3.29 [0.37]				
LPT	1	3.02 [0.15]	1980.06 [1977.11,1991.01]	2.11 [0.15]				
LPFR	1	1.22 [0.19]	1966.01 [1960.02,1966.03]	2.27 [0.08]				
LPS	2	1.81 [0.14]	1970.05 [1966.02,1970.12]	3.01 [0.15]	1979.03 [1978.08,1982.09]	1.70 [0.10]		
LPGOV	1	3.26 [0.18]	1983.11 [1980.06,1993.06]	2.11 [0.21]				
LW	0							
LPHRM	1	293.55 [16.42]	1984.05 [1983.03,1991.12]	170.31 [20.52]				
LPMOSA	0							

Wages and salaries

LEH	3	2.94 [0.30]	1970.09 [1967.08,1971.11]	4.50 [0.22]	1981.03 [1979.12,1984.11]	3.08 [0.19]	1994.08 [1994.04,1996.10]	1.87 [0.31]
LEHCC	1	6.85 [0.32]	1992.10 [1989.09,1998.03]	3.98 [0.67]				
LEHM	2	3.54 [0.32]	1970.08 [1965.12,1972.07]	5.55 [0.30]	1982.02 [1981.03,1984.12]	2.97 [0.24]		
LEHTU	1	5.67 [0.30]	1984.02 [1983.02,1993.07]	4.01 [0.33]				
LEHTT	1	3.83 [0.17]	1987.06 [1986.08,1991.02]	2.43 [0.23]				
LEHFR	2	4.56 [0.56]	1971.02 [1969.03,1971.12]	8.25 [0.32]	1989.06 [1989.04,1990.04]	2.62 [0.42]		
LEHS	2	4.70 [0.20]	1987.12 [1986.12,1993.11]	3.10 [0.37]	1994.09 [1993.12,1998.09]	2.09 [0.41]		

Construction

HSFR	1	103.92 [4.62]	1985.03 [1979.03,1992.03]	74.05 [6.03]				
HSNE	0							
HSMW	0							
HSSOU	0							
HSWST	0							
HSBR	2	51.25 [7.40]	1966.01 [1960.08,1968.02]	82.76 [3.61]	1991.03 [1990.10,1994.07]	42.52 [6.13]		
HSBNE	1	153.75 [7.53]	1984.03 [1981.04,1994.11]	104.59 [9.13]				
HSBMW	1	131.18 [6.30]	1990.05 [1989.05,1995.10]	70.75 [11.03]				
HSBSOU	1	91.16 [3.98]	1991.02 [1988.01,1999.12]	69.44 [7.35]				
HSBWST	0							
HNS	0							
HNSNE	2	148.01 [29.58]	1977.11 [1974.02,1978.09]	242.16 [13.56]	1996.02 [1995.07,1999.12]	153.19 [29.58]		

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Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
HNSMW	0							
HNSSOU	1	147.42 [8.31]	1984.11 [1982.03,1990.04]	101.46 [7.04]				
HNSWST	0							
HNR	1	631.76 [29.17]	1992.03 [1989.11,1999.12]	434.73 [55.61]				
HMOB	2	66.52 [3.04]	1980.09 [1979.06,1988.12]	43.11 [3.93]	1993.01 [1991.07,1997.07]	27.56 [5.25]		
CONTC	1	21.27 [0.98]	1984.02 [1982.10,1989.02]	13.75 [1.08]				
CONPC	1	24.14 [1.31]	1977.04 [1976.06,1982.11]	14.83 [0.96]				
CONQC	2	30.46 [3.52]	1971.06 [1966.06,1972.09]	47.14 [2.55]	1983.09 [1981.12,1988.05]	30.13 [2.21]		
CONDO9	1	69.01 [10.97]	1966.09 [1962.07,1967.07]	121.21 [4.91]				
Trade								
MSMTQ	1	12.02 [0.46]	1992.09 [1991.01,1999.07]	8.44 [0.98]				
MSMQ	0							
MSDQ	1	24.01 [0.97]	1992.01 [1989.11,1999.12]	17.20 [1.95]				
MSNQ	0							
WTQ	1	18.09 [0.74]	1987.03 [1985.04,1992.11]	12.05 [1.08]				
WTDQ	2	13.92 [1.75]	1965.12 [1961.01,1967.11]	20.37 [0.81]	1993.04 [1991.12,1996.08]	12.53 [1.65]		
WTNQ	2	25.53 [1.16]	1982.07 [1979.05,1997.02]	19.44 [1.62]	1994.01 [1993.05,1998.11]	13.36 [2.26]		
RTQ	1	15.54 [0.71]	1987.02 [1986.05,1992.08]	8.92 [1.03]				
RTDQ	1	33.08 [1.62]	1990.02 [1989.10,1995.10]	16.43 [2.83]				
RTNQ	1	13.36 [0.53]	1979.12 [1979.04,1982.06]	7.21 [0.53]				
Inventories								
IVMTQ	1	4.88 [0.21]	1984.08 [1983.02,1994.09]	3.41 [0.26]				
IVMFGQ	1	5.50 [0.24]	1986.09 [1984.11,1996.09]	3.88 [0.34]				
IVMFDQ	1	8.01 [0.38]	1976.02 [1970.04,1980.10]	5.67 [0.32]				
IVMFNQ	1	6.28 [0.24]	1986.12 [1985.09,1991.06]	4.15 [0.35]				
IVVRQ	1	10.03 [0.43]	1983.06 [1982.02,1987.11]	6.43 [0.51]				
IVRRQ	1	9.45 [0.39]	1988.02 [1985.08,1994.03]	6.44 [0.61]				
IVSRQ	1	17.41 [0.70]	1992.09 [1991.03,1999.05]	11.85 [1.49]				
IVSRMQ	1	26.33 [1.07]	1993.07 [1992.02,1999.12]	18.92 [2.43]				
IVSRWQ	2	17.20 [1.41]	1971.06 [1964.09,1974.06]	24.04 [1.02]	1993.05 [1992.01,1999.03]	16.63 [1.86]		
IVSRRQ	1	21.80 [1.00]	1993.04 [1992.05,1999.12]	13.92 [2.24]				
Orders								
MOCMQ	1	29.51 [1.16]	1991.12 [1990.10,1997.11]	19.97 [2.32]				
MDOQ	1	39.50 [1.48]	1993.03 [1991.07,1999.12]	28.46 [3.29]				
MSONDQ	1	50.63 [7.61]	1967.12 [1963.03,1968.09]	93.48 [3.79]				
MO	1	23.64 [0.89]	1993.07 [1991.12,1999.12]	17.12 [2.04]				
MOWU	1	35.05 [1.30]	1993.07 [1991.02,1999.12]	25.76 [2.98]				
MDO	1	39.58 [1.49]	1993.03 [1991.09,1999.12]	28.53 [3.31]				
MDUWU	0							

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Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
MNO	2	11.30 [0.96]	1972.05 [1970.04,1973.06]	19.88 [1.13]	1981.05 [1979.08,1984.09]	13.22 [0.78]		
MNOU	0							
MU	2	14.49 [0.57]	1979.04 [1979.02,1984.12]	7.67 [0.72]	1991.03 [1986.01,1992.08]	11.33 [0.84]		
MDU	2	15.10 [0.58]	1979.04 [1979.02,1984.08]	7.83 [0.74]	1991.03 [1987.02,1992.08]	11.76 [0.86]		
MNU	1	24.43 [1.11]	1980.05 [1977.11,1995.04]	17.59 [1.13]				
MPCON	1	53.22 [7.25]	1967.12 [1963.04,1968.06]	93.07 [3.61]				
MPCONQ	1	56.24 [7.14]	1967.12 [1962.04,1968.08]	91.80 [3.55]				

Consumption

GMCQ	1	7.29 [0.30]	1987.02 [1985.07,1992.10]	4.85 [0.44]				
GMCDQ	1	34.27 [1.51]	1991.04 [1990.11,1999.09]	20.89 [2.87]				
GMCNQ	1	9.40 [0.38]	1987.03 [1985.05,1990.11]	5.96 [0.55]				
GMCSQ	2	2.92 [0.25]	1974.09 [1970.03,1975.06]	4.88 [0.22]	1993.06 [1992.04,1999.08]	3.22 [0.37]		
GMCANQ	1	94.38 [4.53]	1991.06 [1991.02,1999.12]	58.24 [8.70]				

Money and credit

FM1	1	3.87 [0.30]	1979.03 [1975.09,1979.08]	7.33 [0.29]				
FM2	1	2.17 [0.31]	1969.03 [1962.05,1969.08]	4.36 [0.17]				
FM3	1	2.41 [0.30]	1968.10 [1962.08,1969.04]	4.84 [0.16]				
FML	1	4.86 [0.21]	1989.12 [1983.05,1992.10]	6.51 [0.39]				
FM2DQ	0							
FMFBA	0							
FMBASE	0							
FMRRRA	1	10.17 [0.54]	1985.01 [1977.06,1987.08]	14.23 [0.69]				
FMRNBA	1	10.10 [2.11]	1968.01 [1967.12,1968.01]	20.56 [1.06]				
FMRNBC	2	13.19 [0.99]	1977.07 [1973.07,1978.01]	24.17 [1.33]	1987.02 [1986.06,1990.07]	12.39 [1.32]		
FCLS	0							
FCSGV	0							
FCLRE	0							
FCLIN	0							
FCLNBF	0							
FCLNQ	1	8.15 [0.80]	1970.09 [1962.06,1975.06]	12.04 [0.49]				
FCLBMC	2	4685.11 [3726.26]	1969.12 [1969.11,1969.12]	31008.36 [2686.14]	1989.01 [1985.08,1989.04]	72269.96 [3551.49]		
CCI30M	1	49.19 [6.74]	1974.12 [1973.01,1975.02]	127.26 [5.72]				
CCINT	1	691807.18 [416284.73]	1979.11 [1979.10,1979.11]	3356552.52 [204829.55]				
CCINV	1	555053.54 [144546.48]	1982.08 [1980.12,1982.10]	1814303.07 [102534.79]				

Stock prices

FSNCOM	1	41.68 [1.78]	1991.03 [1987.08,1998.06]	28.95 [3.36]				
FSNIN	1	46.14 [2.16]	1991.03 [1989.11,1995.10]	28.58 [3.59]				
FSNTR	1	64.78 [2.71]	1991.02 [1989.03,1995.01]	43.42 [4.47]				
FSNUT	1	47.20 [2.64]	1976.01 [1973.09,1981.03]	33.65 [1.62]				

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Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
FSNFI	0							
FSPCOM	0							
FSPIN	1	41.45 [1.80]	1991.03 [1986.10,1999.12]	30.31 [3.39]				
FSPCAP	0							
FSPTR	1	62.47 [2.91]	1991.02 [1988.07,1996.08]	44.94 [4.39]				
FSPUT	0							
FSPFI	0							

Dividends and volume

FSDXP	0							
FSPXE	0							
FSNVV3	2	65.70 [3.77]	1982.01 [1981.04,1984.04]	34.31 [3.97]	1988.05 [1987.07,1992.07]	20.05 [3.30]		

Interest rates

FYFF	2	396.25 [48.36]	1979.07 [1961.07,1980.12]	743.50 [59.23]	1992.07 [1992.06,1992.08]	164.15 [78.42]		
FYCP	3	355.81 [44.42]	1977.03 [1960.02,1997.08]	343.34 [120.47]	1979.07 [1975.10,1979.08]	914.76 [58.19]	1989.07 [1989.06,1989.08]	271.37 [64.73]
FYGM3	3	210.42 [48.25]	1969.11 [1967.06,1970.09]	464.52 [48.67]	1979.07 [1975.08,1979.08]	1126.21 [62.21]	1985.06 [1985.05,1985.07]	224.57 [39.74]
FYGM6	3	166.31 [54.24]	1966.05 [1964.09,1967.06]	429.92 [37.62]	1979.07 [1976.11,1979.08]	1068.14 [56.11]	1985.06 [1985.05,1985.07]	252.51 [35.84]
FYGT1	3	204.72 [45.10]	1969.05 [1967.09,1969.11]	494.12 [43.21]	1979.07 [1975.11,1979.08]	1148.25 [56.65]	1985.06 [1985.05,1986.02]	305.78 [36.19]
FYGT5	1	160.77 [34.55]	1969.08 [1965.05,1969.09]	436.46 [19.42]				
FYGT10	3	85.49 [31.87]	1966.06 [1965.04,1966.09]	247.53 [22.18]	1979.09 [1978.04,1979.10]	667.47 [31.27]	1986.05 [1986.02,1988.03]	308.49 [21.90]
FYAAAC	3	40.64 [24.86]	1966.05 [1965.04,1966.06]	160.65 [17.13]	1979.09 [1978.10,1979.10]	579.37 [24.54]	1986.03 [1985.12,1987.05]	225.38 [16.87]
FYBAAC	3	39.22 [23.06]	1966.02 [1964.08,1966.04]	160.16 [15.43]	1979.09 [1978.04,1979.10]	491.52 [22.17]	1986.04 [1986.01,1988.04]	222.48 [15.38]
FWAFIT	1	527.31 [32.30]	1981.06 [1980.12,1983.09]	261.52 [24.56]				
FYFHA	3	64.27 [32.77]	1968.03 [1964.05,1968.07]	198.09 [27.72]	1979.08 [1977.11,1979.10]	713.85 [38.50]	1985.07 [1985.03,1988.07]	330.59 [24.66]

Exchange rates

EXRUS	2	13.02 [2.12]	1979.09 [1978.07,1980.10]	25.06 [1.26]	1992.11 [1989.06,1996.01]	18.08 [1.72]		
EXRGER	1	22.29 [3.05]	1980.02 [1977.06,1982.03]	34.38 [1.58]				
EXRSW	0							
EXRJAN	0							
EXRUK	1	34.15 [1.64]	1993.04 [1992.12,1995.08]	17.63 [2.72]				
EXRCAN	0							

Producer prices

PWFSA	0							
PWFCSA	2	5.24 [0.47]	1972.11 [1969.09,1973.02]	10.11 [0.58]	1981.04 [1980.01,1984.03]	5.22 [0.39]		
PWIMSA	1	4.02 [0.52]	1972.08 [1965.12,1972.08]	7.12 [0.35]				
PWCMSA	1	13.19 [1.99]	1972.10 [1970.03,1972.10]	26.77 [1.36]				
PWFXSA	1	2.95 [0.71]	1973.01 [1968.02,1973.11]	6.13 [0.31]				
PW160A	1	27.52 [1.70]	1981.02 [1979.12,1983.08]	17.15 [0.97]				
PW150A	1	27.09 [1.85]	1981.04 [1980.05,1984.09]	16.10 [1.07]				
PW561	2	20.40 [4.97]	1973.08 [1964.12,1974.08]	38.83 [5.20]	1986.01 [1983.03,1986.05]	107.29 [4.91]		

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Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
PWCM	2	5.14 [0.55]	1968.09 [1962.09,1969.01]	9.93 [0.47]	1980.08 [1980.05,1986.10]	5.24 [0.37]		
PWXFA	1	3.89 [0.82]	1972.11 [1968.02,1973.04]	6.79 [0.35]				
PSM99Q	2	12.41 [1.19]	1972.02 [1969.08,1972.06]	26.14 [1.38]	1981.02 [1979.09,1986.09]	17.14 [0.95]		
PSCCOM	2	15.38 [1.54]	1972.11 [1970.09,1972.12]	40.38 [2.27]	1978.10 [1978.04,1982.05]	21.16 [1.20]		
PSCFOO	2	21.29 [2.36]	1972.11 [1971.10,1972.12]	61.79 [3.47]	1978.10 [1978.05,1982.04]	30.76 [1.84]		
PSCMAT	2	18.88 [1.50]	1972.09 [1970.10,1973.02]	36.34 [2.09]	1979.03 [1977.05,1982.04]	22.99 [1.17]		
PZFR	0							
PCGOLD	1	84.75 [6.00]	1983.03 [1982.11,1985.08]	37.97 [3.92]				
Consumer prices								
PUNEW	2	3.31 [0.18]	1977.05 [1973.11,1977.11]	6.63 [0.30]	1983.04 [1983.02,1985.03]	2.14 [0.18]		
PU81	2	4.20 [0.65]	1972.12 [1969.04,1973.01]	8.79 [0.57]	1979.05 [1979.03,1982.06]	3.82 [0.32]		
PUH	2	3.26 [0.23]	1978.03 [1977.05,1978.04]	9.32 [0.34]	1982.12 [1982.10,1983.07]	2.59 [0.18]		
PU83	1	3.22 [0.21]	1986.01 [1983.08,1986.09]	6.05 [0.28]				
PU84	0							
PU85	1	4.22 [0.16]	1981.11 [1980.11,1983.07]	2.18 [0.17]				
PUC	2	2.98 [0.30]	1972.12 [1970.06,1973.02]	6.47 [0.34]	1982.09 [1981.04,1985.12]	3.50 [0.26]		
PUCD	2	3.23 [0.25]	1974.03 [1971.04,1976.01]	6.33 [0.29]	1984.05 [1983.12,1986.09]	2.83 [0.24]		
PUS	3	3.43 [0.19]	1977.02 [1974.06,1977.03]	7.75 [0.32]	1983.01 [1982.12,1983.02]	1.31 [0.29]	1990.02 [1988.06,1990.10]	2.27 [0.25]
PUXF	2	3.16 [0.18]	1977.05 [1974.02,1977.07]	7.17 [0.31]	1983.04 [1983.01,1985.05]	2.20 [0.19]		
PUXHS	3	3.86 [0.33]	1966.06 [1965.10,1968.11]	2.34 [0.33]	1972.12 [1970.11,1973.01]	5.71 [0.29]	1981.03 [1980.08,1983.10]	2.61 [0.19]
PUXM	3	3.98 [0.32]	1965.12 [1965.05,1967.02]	1.91 [0.30]	1973.01 [1971.05,1973.02]	6.02 [0.25]	1982.12 [1982.08,1984.11]	2.28 [0.19]
GMDC	3	3.39 [0.21]	1966.01 [1965.10,1967.02]	1.40 [0.20]	1973.01 [1971.12,1973.02]	4.96 [0.18]	1981.03 [1980.12,1982.09]	2.04 [0.12]
GMDCD	3	3.15 [0.23]	1974.04 [1971.12,1975.02]	6.04 [0.33]	1981.07 [1981.04,1983.01]	2.45 [0.25]	1994.01 [1991.08,1995.02]	4.08 [0.36]
GMDCN	3	3.79 [0.43]	1965.12 [1965.06,1968.06]	2.34 [0.39]	1972.12 [1972.11,1972.12]	6.73 [0.36]	1981.03 [1980.02,1985.09]	3.78 [0.24]
GMDCS	3	3.42 [0.18]	1966.03 [1965.11,1967.03]	1.56 [0.15]	1975.04 [1974.07,1975.05]	4.73 [0.18]	1981.09 [1981.05,1982.07]	1.85 [0.10]
Miscellaneous								
PMI	1	3264.26 [137.06]	1984.09 [1982.10,1989.09]	2100.27 [174.32]				
PMP	1	4652.28 [211.73]	1984.08 [1983.04,1993.02]	3108.60 [268.10]				
PMNO	0							
PMDEL	1	4737.12 [213.66]	1984.10 [1984.05,1986.12]	2079.21 [272.94]				
PMNV	1	4288.80 [195.36]	1981.12 [1978.01,1988.11]	3110.09 [215.57]				
PMEMP	1	3492.25 [142.77]	1988.01 [1986.10,1992.08]	2217.17 [218.84]				
PMCP	0							
HHSNTN	1	2207.51 [236.43]	1978.02 [1976.04,1979.04]	5327.07 [215.17]				
F6EDM	0							
FTMC6	1	136.18 [5.73]	1991.06 [1990.10,1996.08]	83.93 [11.48]				
FTMM6	1	95.64 [4.58]	1987.03 [1986.11,1990.10]	49.90 [6.03]				

Results for tests for multiple structural changes in unconditional volatility for individual series, when allowing for nonlinearity in the unconditional mean. The column headed m contains the number of detected changes using the sequential procedure of Bai and Perron (1998). Columns headed σ_j , $j = 1, \dots, 4$ contains the estimate of the unconditional standard deviation between the $(j-1)$ st and j th break. Figures in brackets below these estimates are standard errors. The estimated break date for the j -th change is given in the column headed $\tau_{v,j}$, with the 90% confidence interval for the break date given in brackets.

Table A.16: Tests for multiple structural changes in conditional variance - allowing for nonlinearity and structural change during expansions in the unconditional mean

Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
Production								
IP	1	8.95 [0.40]	1984.03 [1983.04,1989.09]	5.60 [0.49]				
IPP	1	8.81 [0.41]	1980.08 [1975.02,1991.07]	6.78 [0.42]				
IPF	0							
IPC	1	11.44 [0.55]	1980.09 [1977.05,1993.02]	8.67 [0.57]				
IPCD	0							
IPCN	1	9.05 [0.35]	1990.02 [1986.02,1999.12]	7.15 [0.62]				
IPE	1	13.39 [0.53]	1992.04 [1988.10,1996.08]	9.07 [1.10]				
IPI	1	10.67 [0.41]	1992.06 [1991.08,1995.08]	6.44 [0.85]				
IPM	1	12.50 [0.54]	1984.03 [1983.10,1987.09]	6.76 [0.67]				
IPMD	1	18.11 [0.82]	1984.01 [1983.10,1988.09]	9.37 [1.01]				
IPMND	1	13.83 [0.65]	1984.04 [1983.03,1996.10]	9.47 [0.81]				
IPMFG	1	9.80 [0.45]	1984.01 [1983.01,1990.06]	6.17 [0.55]				
IPD	1	13.12 [0.63]	1984.01 [1982.07,1990.09]	8.30 [0.77]				
IPN	2	6.59 [0.74]	1966.12 [1960.02,1969.04]	9.40 [0.41]	1990.01 [1989.09,1993.12]	5.46 [0.62]		
IPMIN	1	14.25 [0.69]	1986.11 [1983.03,1999.12]	10.56 [0.98]				
IPUT	2	8.56 [1.85]	1967.02 [1964.10,1967.05]	16.46 [1.24]	1982.11 [1972.01,1984.04]	23.92 [1.19]		
IPX	1	740.52 [38.67]	1984.03 [1983.03,1989.04]	463.07 [39.17]				
IPXMCA	1	806.45 [36.41]	1984.01 [1982.12,1989.06]	497.28 [44.71]				
IPXDCA	1	1067.30 [61.61]	1982.02 [1980.09,1987.12]	675.05 [54.75]				
IPXNCA	1	762.62 [33.73]	1990.01 [1989.09,1994.01]	465.33 [50.24]				
IPXMIN	1	1368.65 [73.89]	1986.06 [1984.07,1994.09]	950.09 [86.30]				
IPXUT	1	1430.51 [119.80]	1982.11 [1971.11,1984.05]	2053.17 [111.64]				
GMPYQ	0							
GMYPQ	0							
(Un)Employment								
LHEL	1	1957.02 [105.75]	1986.10 [1984.02,1987.10]	3221.60 [150.74]				
LHELX	1	64.12 [3.72]	1970.05 [1968.05,1977.12]	41.72 [2.20]				
LHEM	2	5.02 [0.35]	1965.12 [1964.10,1975.01]	3.33 [0.20]	1984.08 [1981.05,1990.07]	2.37 [0.22]		
LHNAG	2	4.33 [0.30]	1965.12 [1963.12,1972.10]	2.97 [0.14]	1992.03 [1990.05,1998.09]	2.11 [0.26]		
LHUR	1	210.33 [8.61]	1986.02 [1984.01,1995.05]	150.80 [11.82]				
LHU680	2	762.73 [55.38]	1966.02 [1965.07,1968.05]	391.64 [46.40]	1974.10 [1965.03,1977.08]	547.12 [27.23]		
LHU5	3	74.84 [4.42]	1970.02 [1966.01,1981.11]	56.61 [3.62]	1985.02 [1983.11,1988.03]	32.73 [4.79]	1993.09 [1992.01,1994.02]	70.83 [5.61]
LHU14	1	72.44 [3.62]	1975.08 [1972.08,1985.03]	52.71 [2.90]				
LHU15	1	76.37 [4.23]	1970.12 [1968.02,1975.05]	52.03 [2.60]				
LHU26	1	115.52 [6.19]	1971.02 [1967.06,1975.03]	81.19 [3.84]				
LHU27	1	105.80 [4.72]	1976.07 [1975.08,1980.01]	62.29 [3.96]				

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Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
LHCH	0							
LPNAG	1	2.36 [0.09]	1984.02 [1983.06,1986.04]	1.18 [0.11]				
LP	1	2.76 [0.11]	1984.02 [1983.07,1987.03]	1.38 [0.14]				
LPGD	1	4.94 [0.21]	1984.02 [1983.09,1987.06]	2.44 [0.26]				
LPMI	2	8.24 [0.76]	1974.03 [1968.04,1975.01]	15.40 [0.81]	1986.09 [1986.05,1991.02]	7.11 [0.79]		
LPCC	1	13.78 [0.81]	1978.06 [1977.08,1984.09]	7.09 [0.75]				
LPEM	1	4.60 [0.21]	1984.03 [1983.10,1989.03]	2.18 [0.26]				
LPED	1	6.23 [0.32]	1984.03 [1983.09,1990.10]	3.12 [0.40]				
LPEN	1	3.56 [0.16]	1982.09 [1982.06,1987.07]	1.72 [0.19]				
LPSP	1	1.87 [0.08]	1981.10 [1979.12,1984.10]	1.15 [0.09]				
LPTU	1	5.62 [0.38]	1979.09 [1973.11,1986.07]	3.28 [0.37]				
LPT	1	2.92 [0.15]	1980.06 [1979.02,1988.09]	1.86 [0.15]				
LPFR	0							
LPS	2	1.77 [0.14]	1970.05 [1966.04,1971.01]	3.00 [0.15]	1979.03 [1978.09,1982.05]	1.61 [0.10]		
LPGOV	1	2.89 [0.15]	1990.10 [1990.08,1994.09]	1.27 [0.27]				
LW	1	145.31 [8.93]	1984.05 [1980.02,1995.05]	95.77 [9.95]				
LPHRM	1	293.10 [16.40]	1984.05 [1983.02,1992.04]	172.07 [20.49]				
LPMOSA	0							

Wages and salaries

LEH	1	3.26 [0.13]	1991.03 [1991.01,1992.08]	1.28 [0.22]				
LEHCC	0							
LEHM	1	4.47 [0.21]	1982.02 [1980.07,1985.08]	2.44 [0.24]				
LEHTU	1	5.59 [0.27]	1984.03 [1983.06,1988.04]	3.14 [0.30]				
LEHTT	1	3.61 [0.17]	1981.10 [1979.12,1987.03]	2.49 [0.17]				
LEHFR	2	4.77 [0.55]	1971.02 [1968.11,1971.11]	8.21 [0.32]	1989.06 [1989.04,1990.04]	2.43 [0.42]		
LEHS	1	4.51 [0.18]	1989.02 [1988.10,1990.12]	1.71 [0.27]				

Construction

HSFR	1	104.02 [4.60]	1985.03 [1979.03,1992.04]	74.25 [6.01]				
HSNE	0							
HSMW	0							
HSSOU	0							
HSWST	0							
HSBR	2	50.60 [7.39]	1966.01 [1960.09,1968.02]	82.47 [3.60]	1991.05 [1990.12,1994.11]	42.88 [6.18]		
HSBNE	1	153.67 [7.52]	1984.03 [1981.03,1994.12]	104.73 [9.12]				
HSBMW	1	131.27 [6.32]	1990.03 [1989.03,1995.10]	71.35 [10.93]				
HSBSOU	1	89.78 [3.79]	1994.02 [1991.08,1999.12]	65.63 [9.02]				
HSBWST	0							
HNS	0							
HNSNE	2	175.41 [21.23]	1981.06 [1974.02,1983.10]	250.67 [15.10]	1996.02 [1995.09,1999.12]	157.42 [29.53]		

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Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
HNSMW	0							
HNSSOU	1	146.49 [8.32]	1984.11 [1982.02,1990.09]	101.56 [7.05]				
HNSWST	0							
HNR	1	631.02 [29.15]	1992.03 [1989.12,1999.12]	430.69 [55.57]				
HMOB	2	65.51 [3.05]	1980.09 [1979.06,1990.01]	42.88 [3.96]	1992.12 [1991.07,1997.09]	27.89 [5.24]		
CONTC	1	21.21 [0.98]	1984.02 [1982.09,1988.12]	13.81 [1.08]				
CONPC	1	27.59 [1.84]	1971.04 [1970.09,1976.05]	15.84 [0.86]				
CONQC	2	31.10 [3.49]	1971.06 [1965.12,1972.11]	46.94 [2.53]	1983.09 [1982.01,1988.07]	30.20 [2.19]		
CONDO9	1	69.23 [10.96]	1966.09 [1962.07,1967.06]	121.00 [4.91]				
Trade								
MSMTQ	1	11.94 [0.46]	1992.09 [1990.10,1999.12]	8.58 [0.97]				
MSMQ	0							
MSDQ	0							
MSNQ	0							
WTQ	1	18.13 [0.74]	1987.03 [1985.04,1992.08]	11.97 [1.08]				
WTDQ	2	14.00 [1.75]	1965.12 [1960.10,1967.12]	20.28 [0.81]	1993.04 [1991.12,1996.09]	12.55 [1.65]		
WTNQ	2	25.52 [1.16]	1982.07 [1979.04,1997.02]	19.47 [1.62]	1994.01 [1993.03,1998.07]	13.17 [2.26]		
RTQ	1	15.49 [0.71]	1987.02 [1986.05,1992.11]	8.95 [1.03]				
RTDQ	1	33.03 [1.61]	1990.02 [1989.10,1995.09]	16.55 [2.82]				
RTNQ	1	13.33 [0.53]	1979.12 [1979.04,1982.06]	7.22 [0.53]				
Inventories								
IVMTQ	1	4.79 [0.20]	1984.10 [1983.05,1993.04]	3.35 [0.25]				
IVMFGQ	1	5.34 [0.22]	1986.01 [1983.12,1995.01]	3.84 [0.30]				
IVMFDQ	1	7.19 [0.28]	1986.02 [1983.11,1992.09]	5.03 [0.39]				
IVMFNQ	2	5.03 [0.33]	1973.07 [1967.08,1974.12]	7.15 [0.33]	1986.12 [1986.05,1989.12]	4.20 [0.34]		
IVVRQ	1	9.86 [0.41]	1984.12 [1983.11,1988.12]	6.16 [0.53]				
IVRRQ	1	9.42 [0.39]	1988.01 [1985.09,1994.03]	6.44 [0.60]				
IVSRQ	1	17.38 [0.70]	1992.09 [1991.02,1999.03]	11.70 [1.48]				
IVSRMQ	1	26.16 [1.06]	1993.07 [1992.01,1999.12]	18.85 [2.43]				
IVSRWQ	2	16.96 [1.41]	1971.08 [1965.03,1974.03]	24.00 [1.03]	1993.05 [1992.01,1999.01]	16.48 [1.87]		
IVSRRQ	1	21.78 [1.00]	1993.04 [1992.03,1999.12]	13.82 [2.23]				
Orders								
MOCMQ	1	29.36 [1.16]	1991.12 [1990.09,1998.01]	19.96 [2.32]				
MDOQ	1	39.58 [1.47]	1993.03 [1991.05,1999.12]	28.67 [3.27]				
MSONDQ	1	49.98 [7.62]	1967.12 [1963.04,1968.09]	93.36 [3.79]				
MO	1	23.57 [0.88]	1993.07 [1991.09,1999.12]	17.27 [2.01]				
MOWU	1	34.89 [1.29]	1993.07 [1990.11,1999.12]	26.15 [2.96]				
MDO	1	39.64 [1.47]	1993.03 [1991.06,1999.12]	28.96 [3.26]				
MDUWU	0							

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Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
MNO	0							
MNOU	0							
MU	1	14.02 [0.55]	1979.04 [1979.01,1988.09]	8.18 [0.53]				
MDU	1	14.55 [0.57]	1979.04 [1979.01,1987.12]	8.48 [0.55]				
MNU	1	24.23 [1.11]	1980.05 [1978.07,1991.02]	16.31 [1.13]				
MPCON	1	53.04 [7.25]	1967.12 [1963.03,1968.06]	92.96 [3.61]				
MPCONQ	1	55.63 [7.14]	1967.12 [1962.05,1968.08]	91.79 [3.55]				

Consumption

GMCQ	1	7.24 [0.30]	1987.02 [1985.07,1992.08]	4.79 [0.44]				
GMCDQ	1	34.12 [1.50]	1991.04 [1990.11,1999.12]	21.56 [2.85]				
GMCNQ	1	9.37 [0.38]	1987.03 [1985.05,1990.11]	5.96 [0.55]				
GMCSQ	2	2.77 [0.24]	1974.09 [1970.12,1975.07]	4.87 [0.22]	1993.06 [1992.05,1998.07]	3.08 [0.37]		
GMCANQ	1	94.24 [4.51]	1991.06 [1991.02,1999.12]	58.03 [8.67]				

Money and credit

FM1	1	4.04 [0.29]	1979.03 [1972.07,1980.06]	6.30 [0.28]				
FM2	1	1.87 [0.34]	1966.03 [1960.11,1967.01]	3.67 [0.15]				
FM3	1	2.05 [0.34]	1966.04 [1960.07,1967.04]	4.08 [0.15]				
FML	0							
FM2DQ	2	3.03 [0.33]	1969.02 [1967.11,1969.08]	6.47 [0.39]	1975.06 [1971.03,1977.12]	4.29 [0.20]		
FMFBA	0							
FMBASE	1	3.73 [0.24]	1979.09 [1970.05,1985.06]	4.87 [0.24]				
FMRRRA	0							
FMRNBA	2	15.53 [1.31]	1979.04 [1968.01,1979.08]	31.54 [2.07]	1987.01 [1986.12,1990.02]	13.24 [1.60]		
FMRNBC	2	13.14 [0.98]	1977.07 [1973.03,1978.01]	23.69 [1.32]	1987.02 [1986.05,1991.02]	12.92 [1.31]		
FCLS	0							
FCSGV	1	15.08 [0.78]	1986.07 [1985.09,1992.04]	9.11 [0.75]				
FCLRE	0							
FCLIN	0							
FCLNBF	0							
FCLNQ	1	7.25 [0.78]	1970.09 [1964.09,1971.07]	11.96 [0.47]				
FCLBMC	2	4491.56 [3721.12]	1969.12 [1969.06,1969.12]	30989.03 [2682.44]	1989.01 [1985.07,1989.04]	72348.26 [3546.60]		
CCI30M	1	48.49 [6.74]	1974.12 [1973.01,1975.02]	127.07 [5.71]				
CCINT	1	714487.63 [414810.88]	1979.11 [1979.10,1979.11]	3361921.89 [204104.35]				
CCINV	1	553720.53 [144622.65]	1982.08 [1980.12,1982.10]	1811285.19 [102588.82]				

Stock prices

FSNCOM	1	41.67 [1.76]	1991.03 [1987.09,1998.08]	28.99 [3.33]				
FSNIN	1	46.19 [2.16]	1991.03 [1990.01,1995.02]	27.13 [3.58]				
FSNTR	1	64.29 [2.70]	1991.02 [1988.11,1995.02]	43.07 [4.46]				
FSNUT	1	46.83 [2.65]	1976.01 [1974.01,1981.01]	32.75 [1.63]				

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Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
FSNFI	0							
FSPCOM	0							
FSPIN	1	41.29 [1.78]	1991.03 [1987.07,1999.12]	30.38 [3.36]				
FSPCAP	1	48.27 [2.09]	1991.02 [1987.09,1999.12]	35.24 [3.93]				
FSPTR	1	62.17 [2.92]	1991.02 [1988.05,1996.10]	44.80 [4.40]				
FSPUT	0							
FSPFI	0							

Dividends and volume

FSDXP	0							
FSPXE	0							
FSNVV3	2	65.70 [3.72]	1982.01 [1981.05,1984.04]	34.09 [3.91]	1988.05 [1987.07,1991.11]	19.22 [3.25]		

Interest rates

FYFF	2	414.70 [47.62]	1979.09 [1960.02,1980.12]	746.02 [60.13]	1992.01 [1991.12,1992.02]	163.56 [75.05]		
FYCP	3	268.55 [49.42]	1973.05 [1969.02,1974.03]	570.35 [72.18]	1979.08 [1961.11,1981.03]	908.54 [57.31]	1989.07 [1989.06,1989.08]	251.49 [63.47]
FYGM3	3	230.82 [48.17]	1969.11 [1966.12,1970.12]	463.89 [48.59]	1979.07 [1975.05,1979.08]	1104.35 [62.10]	1985.06 [1985.05,1985.07]	222.49 [39.67]
FYGM6	3	244.52 [43.04]	1970.01 [1967.06,1971.04]	470.43 [44.16]	1979.07 [1975.04,1979.08]	1048.82 [55.96]	1985.06 [1985.05,1985.07]	246.83 [35.74]
FYGT1	2	364.54 [31.85]	1979.07 [1976.04,1979.08]	1122.75 [57.82]	1985.06 [1985.05,1986.01]	301.71 [36.93]		
FYGT5	1	172.26 [34.36]	1969.08 [1965.04,1969.09]	429.24 [19.31]				
FYGT10	3	107.93 [32.05]	1966.06 [1964.08,1966.09]	244.51 [22.31]	1979.09 [1978.03,1979.10]	647.57 [31.45]	1986.05 [1986.02,1988.04]	302.84 [22.03]
FYAAAC	3	63.74 [24.58]	1966.07 [1964.10,1966.08]	161.96 [17.32]	1979.08 [1978.09,1979.09]	578.90 [25.76]	1985.07 [1985.03,1986.09]	230.06 [16.50]
FYBAAC	3	71.62 [21.48]	1966.12 [1964.05,1967.02]	163.44 [15.82]	1979.09 [1978.03,1979.10]	474.41 [22.02]	1986.04 [1985.12,1988.06]	222.64 [15.28]
FWAFIT	1	519.92 [30.70]	1981.11 [1981.05,1983.10]	247.32 [24.38]				
FYFHA	2	157.88 [21.01]	1979.08 [1978.02,1979.09]	703.13 [38.23]	1985.07 [1985.02,1988.07]	329.44 [24.49]		

Exchange rates

EXRUS	1	13.36 [2.14]	1979.09 [1977.04,1981.11]	22.31 [1.03]				
EXRGER	0							
EXRSW	0							
EXRJAN	0							
EXRUK	1	33.73 [1.61]	1993.04 [1992.12,1995.07]	17.82 [2.66]				
EXRCAN	0							

Producer prices

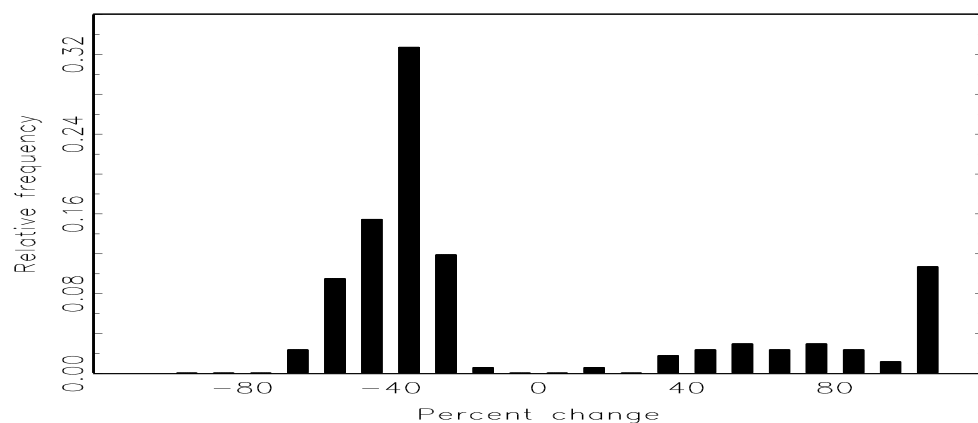
PWFSA	1	6.27 [0.30]	1981.04 [1978.06,1990.02]	4.04 [0.32]				
PWFCSA	1	6.78 [0.30]	1991.03 [1990.06,1997.10]	3.95 [0.57]				
PWIMSA	1	6.61 [0.33]	1991.04 [1991.03,1999.12]	3.83 [0.62]				
PWCMSA	1	13.67 [1.98]	1972.10 [1969.10,1972.10]	26.39 [1.35]				
PWFXSA	1	5.99 [0.31]	1991.03 [1990.10,1999.12]	3.71 [0.50]				
PW160A	1	26.28 [1.71]	1981.02 [1979.11,1985.01]	16.97 [0.97]				
PW150A	1	26.67 [1.83]	1981.04 [1980.07,1984.06]	15.28 [1.06]				
PW561	1	26.15 [3.54]	1986.01 [1983.12,1986.04]	102.11 [4.83]				

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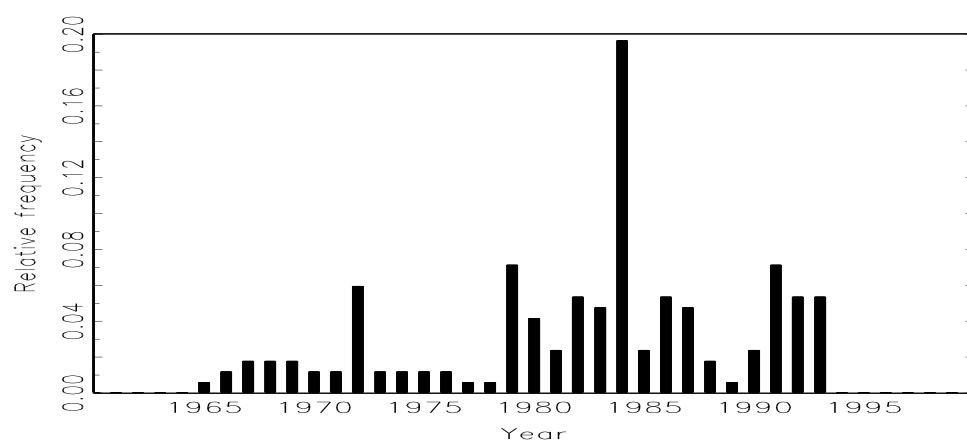
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Series	m	σ_1	$\tau_{v,1}$	σ_2	$\tau_{v,2}$	σ_3	$\tau_{v,3}$	σ_4
PWCM	1	7.94 [0.36]	1980.07 [1979.12,1990.11]	4.76 [0.37]				
PWXFA	0							
PSM99Q	2	13.47 [1.16]	1972.09 [1969.04,1973.04]	25.35 [1.43]	1981.02 [1979.06,1986.09]	16.33 [0.96]		
PSCCOM	2	16.29 [1.50]	1972.11 [1970.01,1972.12]	38.33 [2.21]	1978.10 [1978.05,1982.09]	20.06 [1.17]		
PSCFOO	2	22.49 [2.30]	1972.11 [1971.05,1972.12]	59.92 [3.39]	1978.10 [1978.05,1982.02]	29.71 [1.79]		
PSCMAT	0							
PZFR	0							
PCGOLD	1	81.83 [5.72]	1983.03 [1982.10,1985.07]	37.36 [3.74]				
Consumer prices								
PUNEW	2	2.23 [0.20]	1973.01 [1970.06,1973.05]	5.44 [0.22]	1983.04 [1982.12,1986.03]	2.48 [0.18]		
PU81	2	7.01 [0.41]	1979.02 [1978.10,1983.08]	3.67 [0.36]	1993.07 [1992.05,1997.04]	2.35 [0.54]		
PUH	2	3.39 [0.24]	1978.04 [1976.09,1978.10]	7.58 [0.35]	1983.01 [1982.11,1983.11]	1.67 [0.18]		
PU83	1	3.24 [0.20]	1986.01 [1982.08,1986.10]	5.57 [0.28]				
PU84	0							
PU85	2	3.82 [0.13]	1983.03 [1982.11,1984.10]	1.56 [0.20]	1993.10 [1992.10,1994.04]	3.39 [0.26]		
PUC	1	4.45 [0.19]	1991.03 [1990.09,1998.07]	2.69 [0.36]				
PUCD	1	4.59 [0.19]	1984.05 [1984.01,1990.09]	2.45 [0.23]				
PUS	2	4.32 [0.17]	1982.12 [1982.11,1983.01]	1.52 [0.29]	1990.08 [1989.09,1991.01]	2.81 [0.27]		
PUXF	0							
PUXHS	0							
PUXM	3	3.12 [0.28]	1967.01 [1966.04,1970.06]	1.98 [0.30]	1973.01 [1972.02,1973.01]	5.69 [0.24]	1982.12 [1982.06,1985.08]	2.64 [0.18]
GMDC	3	1.63 [0.15]	1973.02 [1971.08,1973.09]	4.56 [0.19]	1981.03 [1980.11,1982.12]	1.88 [0.16]	1992.07 [1990.11,1994.12]	2.91 [0.19]
GMDCD	2	3.24 [0.23]	1974.03 [1970.06,1975.08]	5.55 [0.32]	1981.06 [1981.02,1983.09]	2.56 [0.20]		
GMDCN	1	4.34 [0.19]	1991.03 [1990.08,1999.12]	2.70 [0.36]				
GMDCS	3	1.52 [0.11]	1975.05 [1974.06,1976.02]	4.12 [0.17]	1982.01 [1981.11,1982.10]	1.24 [0.16]	1989.12 [1988.10,1990.03]	2.69 [0.14]
Miscellaneous								
PMI	1	3255.53 [136.49]	1984.09 [1982.08,1989.08]	2108.00 [173.59]				
PMP	1	4652.43 [210.93]	1984.08 [1983.03,1992.10]	3105.75 [267.07]				
PMNO	0							
PMDEL	1	4690.09 [213.93]	1984.10 [1984.04,1987.01]	2078.12 [273.28]				
PMNV	1	4290.79 [195.60]	1981.12 [1978.04,1988.06]	3063.04 [215.83]				
PMEMP	1	3478.32 [142.71]	1988.01 [1986.10,1992.10]	2228.56 [218.75]				
PMCP	0							
HHSNTN	1	2206.91 [235.51]	1978.02 [1976.04,1979.03]	5326.30 [214.33]				
F6EDM	1	138.63 [9.62]	1972.04 [1971.01,1978.04]	91.27 [4.93]				
FTMC6	2	104.11 [9.58]	1973.04 [1965.10,1975.05]	143.49 [6.52]	1991.02 [1990.07,1994.05]	83.22 [10.46]		
FTMM6	1	92.99 [4.34]	1987.03 [1986.09,1990.12]	51.47 [5.73]				

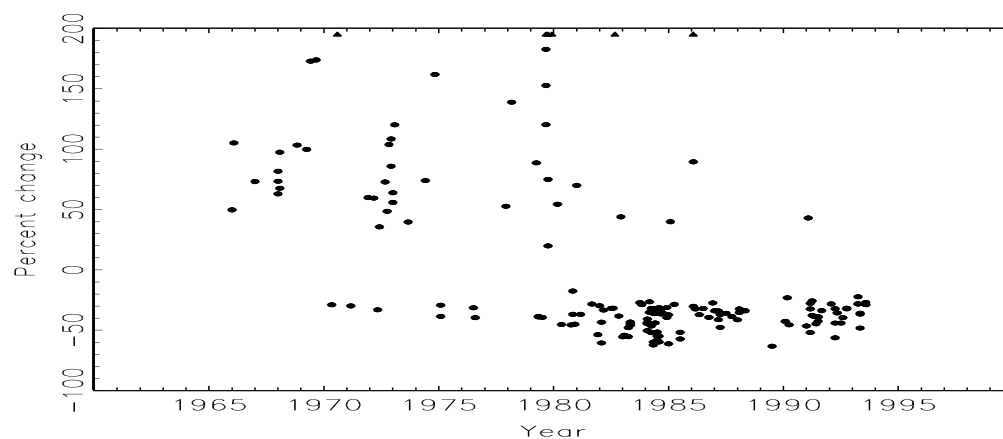
Results for tests for multiple structural changes in unconditional volatility for individual series, when allowing for nonlinearity and structural change during expansions in the unconditional mean. The column headed m contains the number of detected changes using the sequential procedure of Bai and Perron (1998). Columns headed σ_j , $j = 1, \dots, 4$ contains the estimate of the unconditional standard deviation between the $(j-1)$ st and j th break. Figures in brackets below these estimates are standard errors. The estimated break date for the j -th change is given in the column headed $\tau_{v,j}$, with the 90% confidence interval for the break date given in brackets.



(a) Distribution of percent change in unconditional standard deviation



(b) Distribution of break dates



(c) Scatter of break dates against percent change in standard deviation

Figure 1: Characteristics of unconditional volatility breaks for series for which the SupW statistic is significant at the 5% level, when assuming a constant unconditional mean. In panel (a), series for which the standard deviation more than doubles are collected in the right-most category. In panel (c), series for which the standard deviation more than triples are shown as triangles.

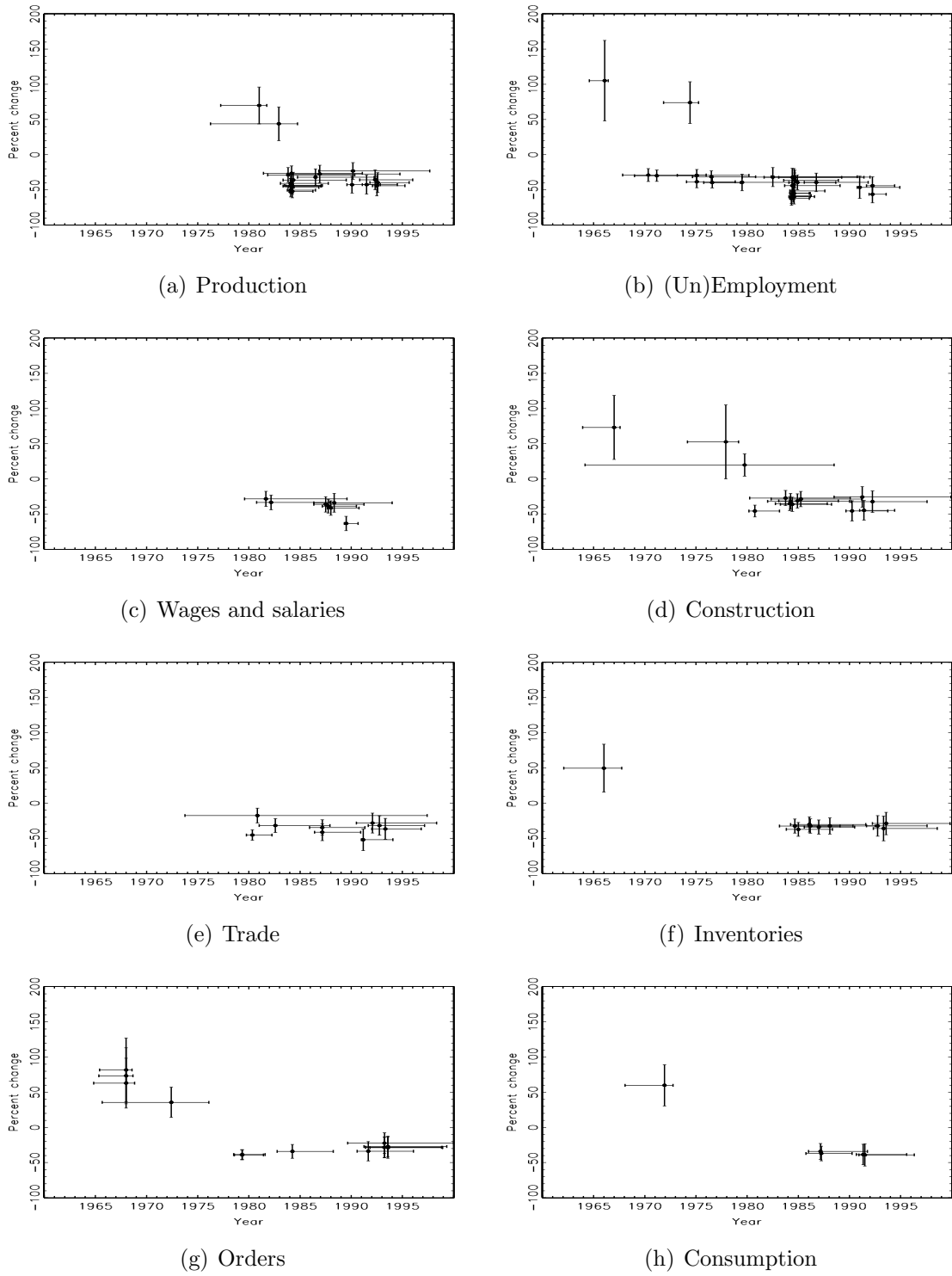
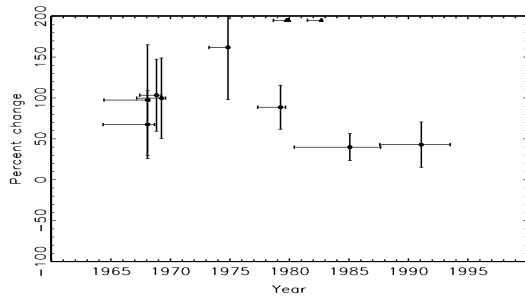
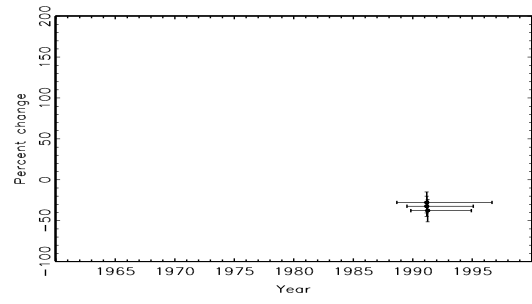


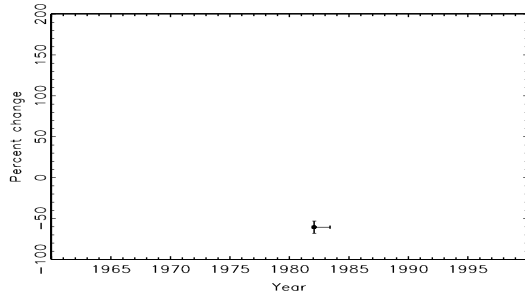
Figure 2: Scatter plots of volatility break dates against percent change in unconditional standard deviation for series for which the SupW statistic is significant at the 5% level, when assuming a constant unconditional mean. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.



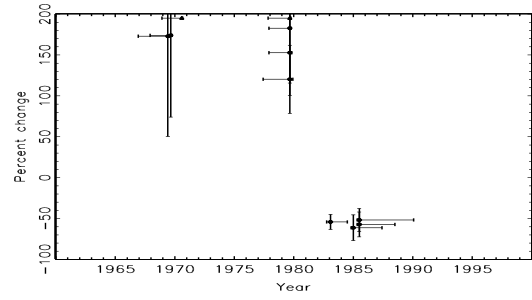
(a) Money and credit



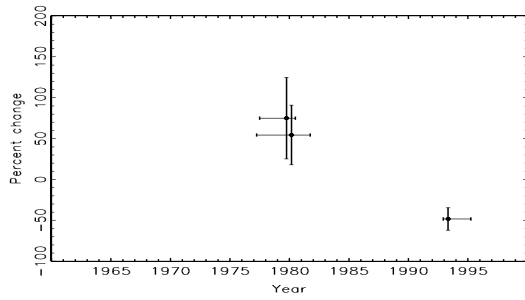
(b) Stock prices



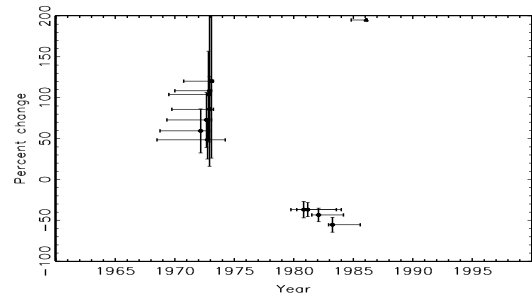
(c) Dividends and volume



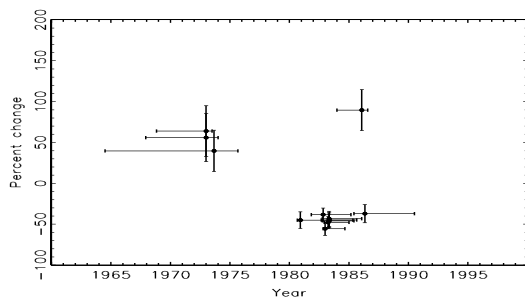
(d) Interest rates



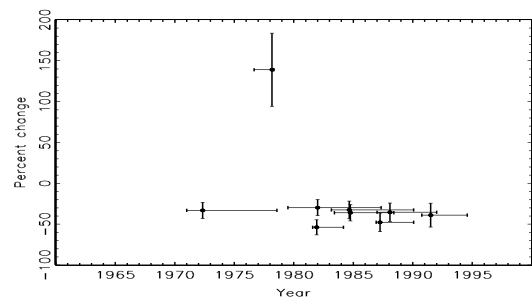
(e) Exchange rates



(f) Producer prices

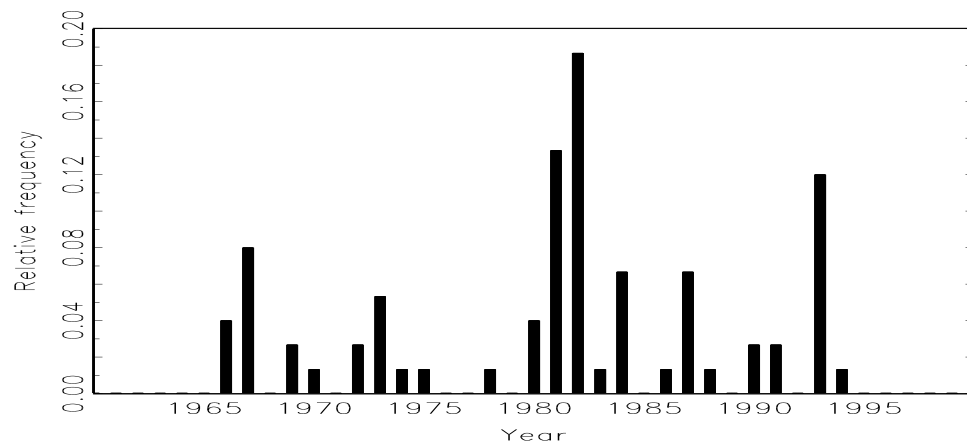


(g) Consumer prices

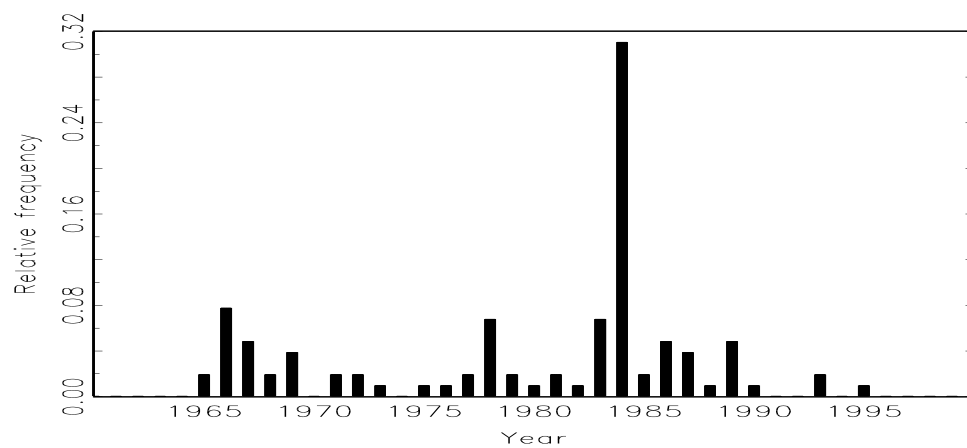


(h) Miscellaneous

Figure 3: Scatter plots of volatility break dates against percent change in unconditional standard deviation for series for which the SupW statistic is significant at the 5% level, when assuming a constant unconditional mean. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.

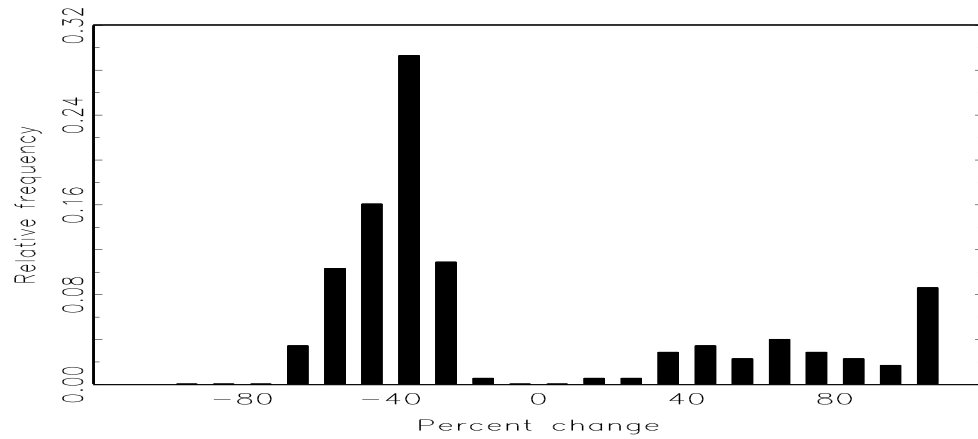


(a) Distribution of break dates in unconditional mean

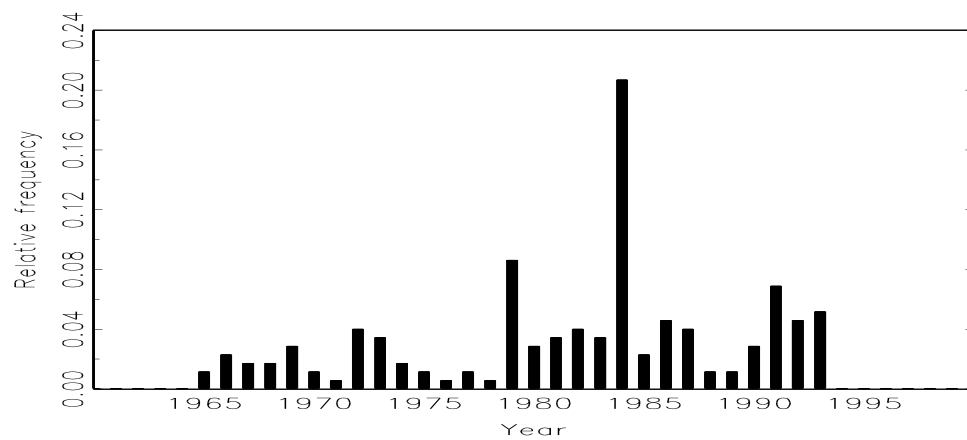


(b) Distribution of break dates in unconditional mean - nonlinear mean

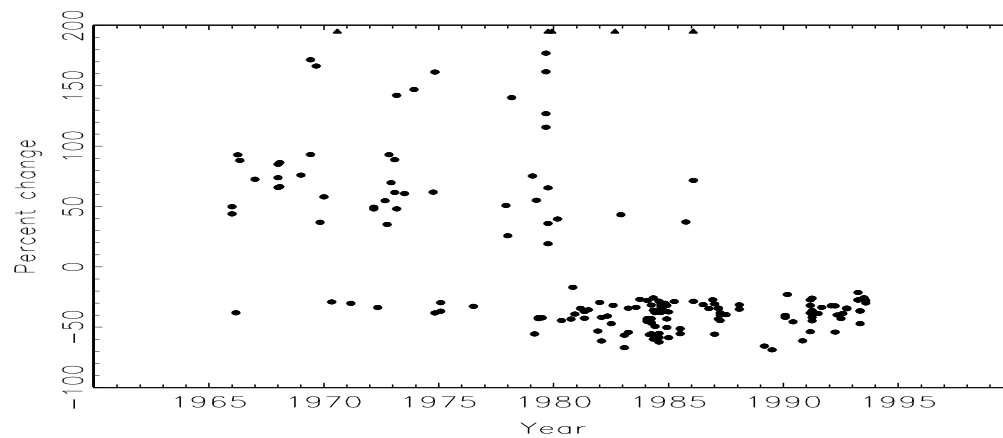
Figure 4: Break dates for series for which the SupW statistic for a structural change in unconditional in a “linear” mean or in the mean during expansions is significant at 5% level.



(a) Distribution of percent change in unconditional standard deviation



(b) Distribution of break dates



(c) Scatter of break dates against percent change in standard deviation

Figure 5: Characteristics of unconditional volatility breaks for series for which the SupW statistic is significant at the 5% level assuming a single structural change in the unconditional mean. In panel (a), series for which the standard deviation more than doubles are collected in the right-most category. In panel (c), series for which the standard deviation more than triples are shown as triangles.

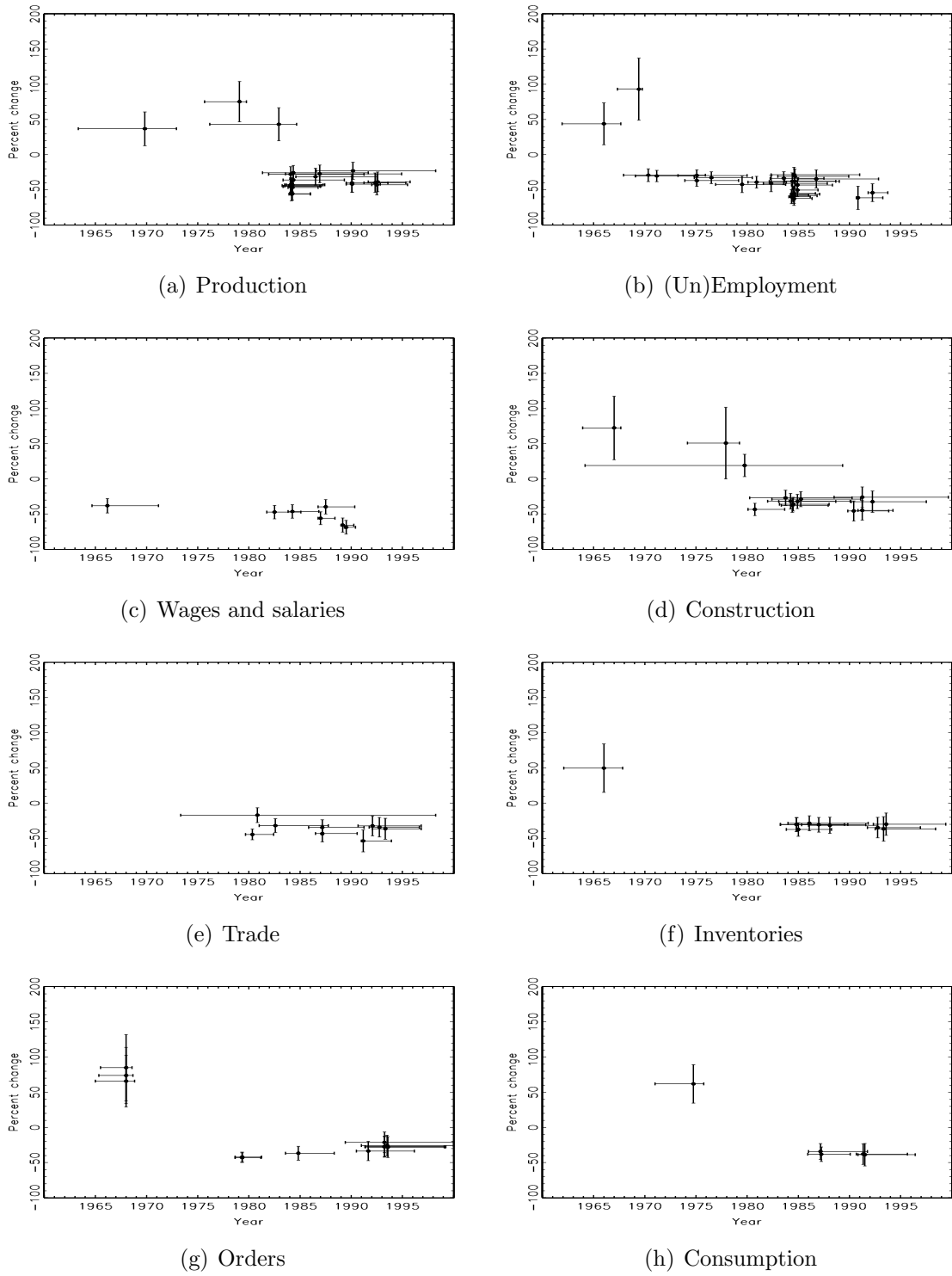


Figure 6: Scatter plots of volatility break dates against percent change in unconditional standard deviation for series for which the SupW statistic is significant at the 5% level, when assuming a single structural change in the unconditional mean. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.

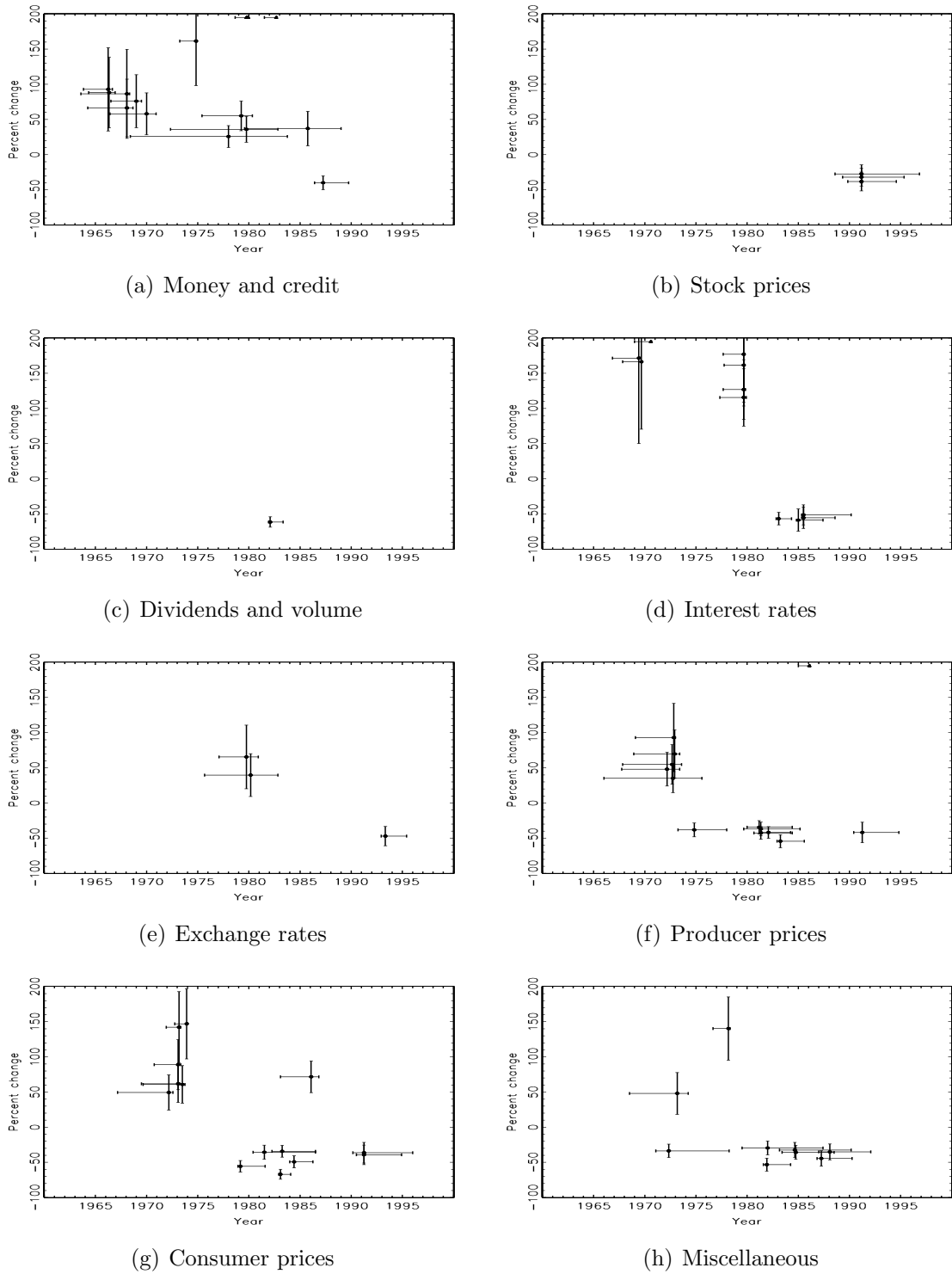
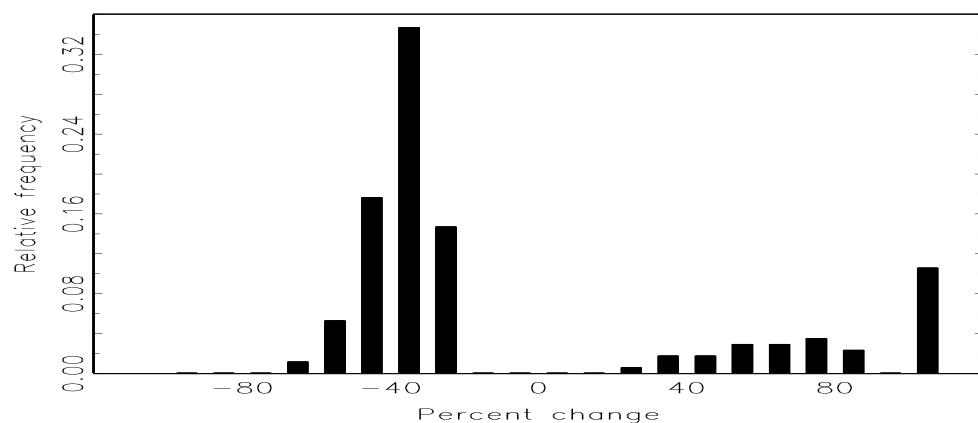
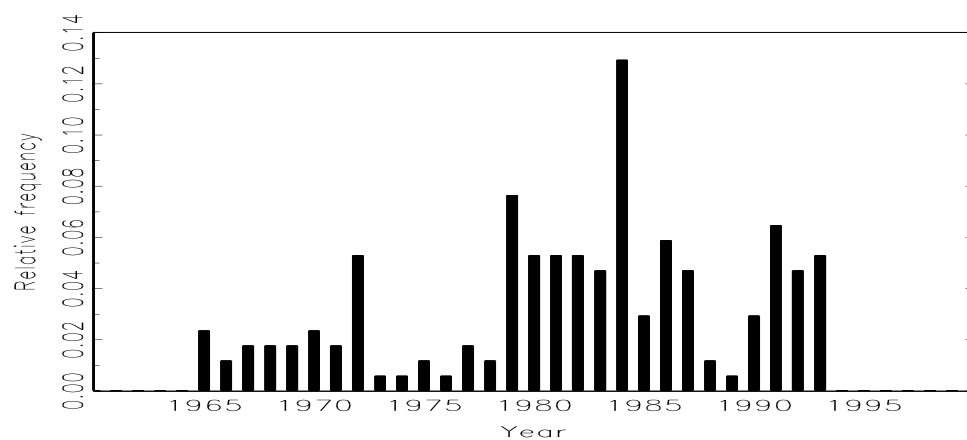


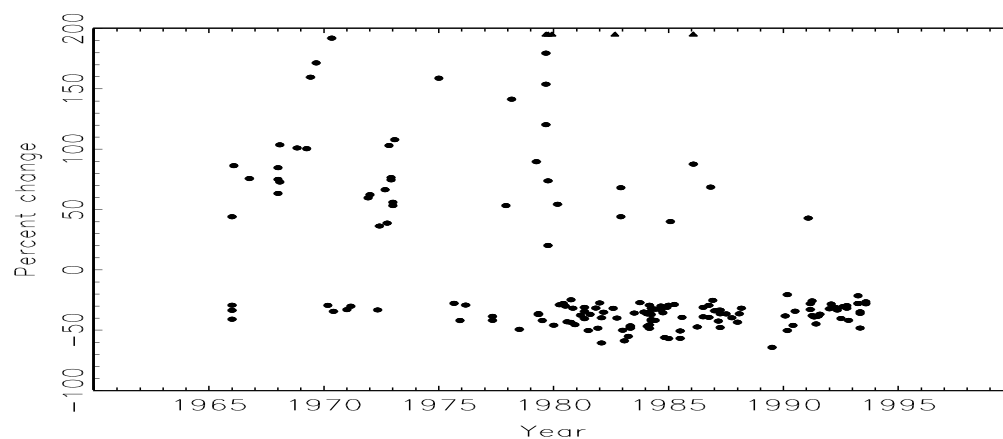
Figure 7: Scatter plots of volatility break dates against percent change in unconditional standard deviation for series for which the SupW statistic is significant at the 5% level, when assuming a single structural change in the unconditional mean. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.



(a) Distribution of percent change in unconditional standard deviation



(b) Distribution of break dates



(c) Scatter of break dates against percent change in standard deviation

Figure 8: Characteristics of unconditional volatility breaks for series for which the SupW statistic is significant at the 5% level, when assuming a nonlinear unconditional mean. In panel (a), series for which the standard deviation more than doubles are collected in the right-most category. In panel (c), series for which the standard deviation more than triples are shown as triangles.

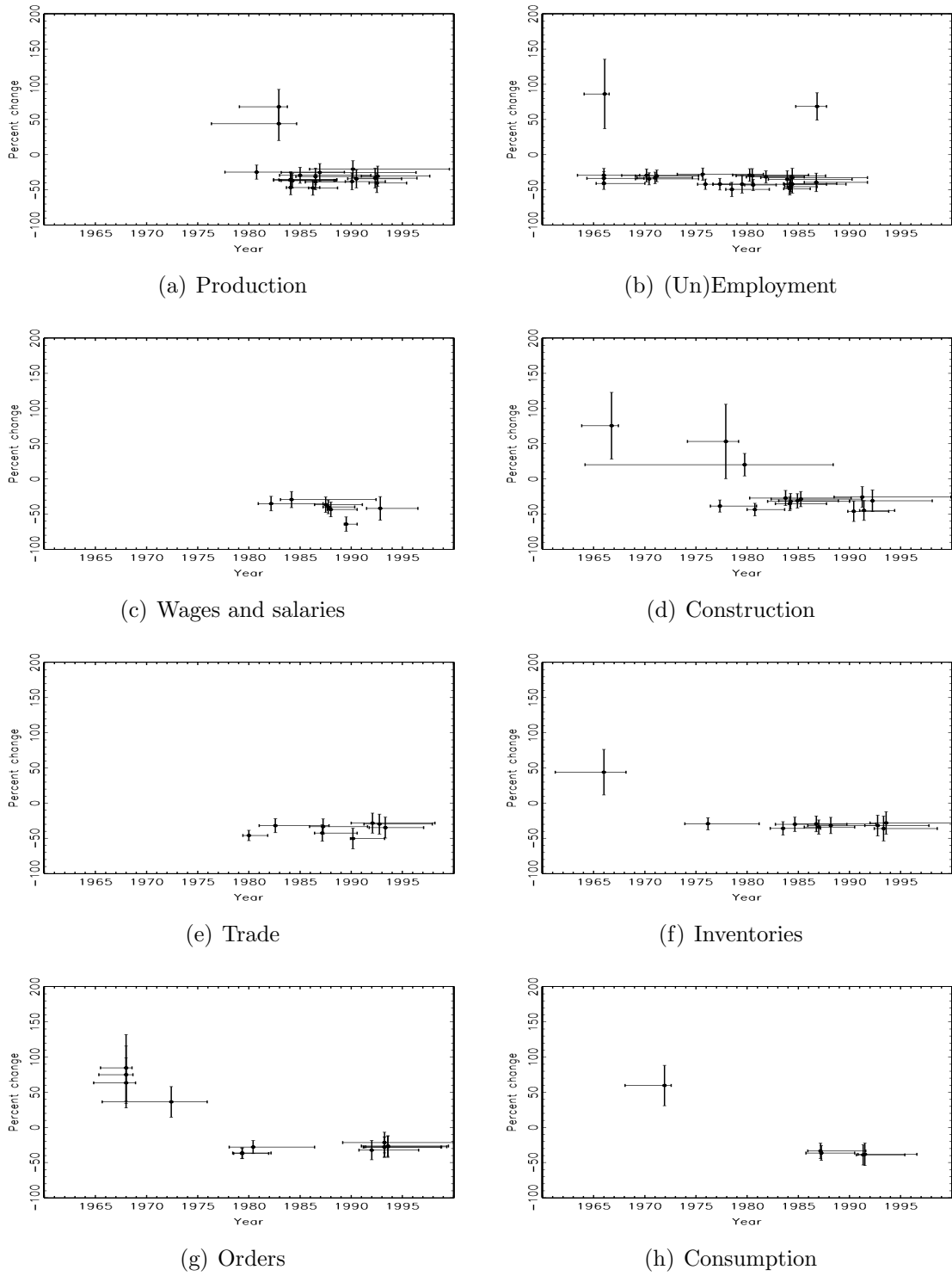


Figure 9: Scatter plots of volatility break dates against percent change in unconditional standard deviation for series for which the SupW statistic is significant at the 5% level, when assuming a nonlinear unconditional mean. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.

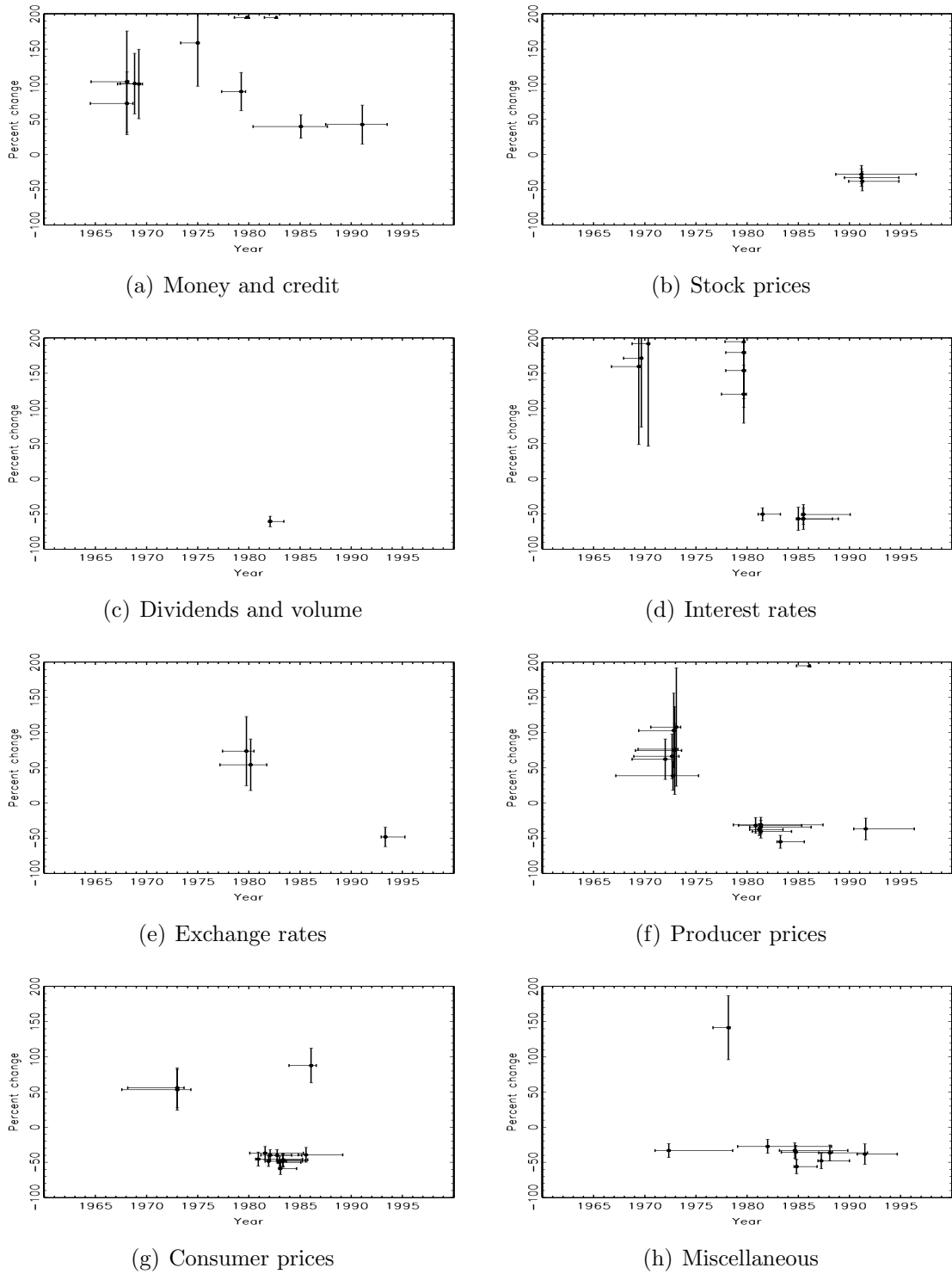
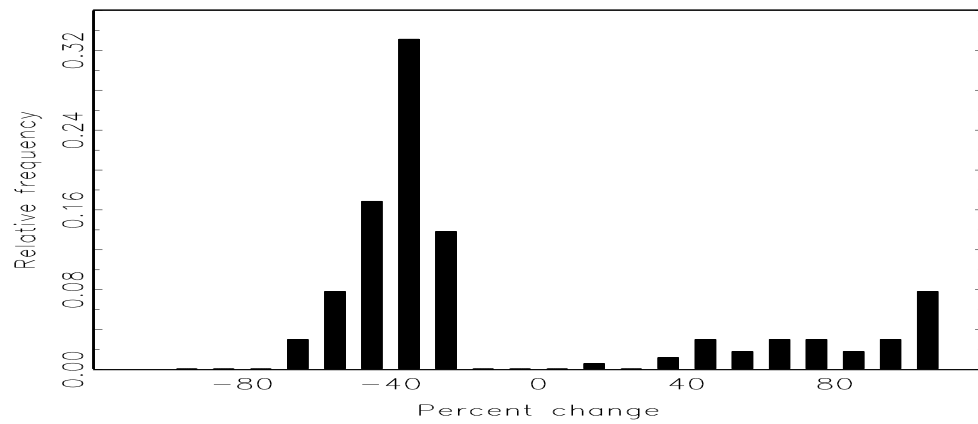
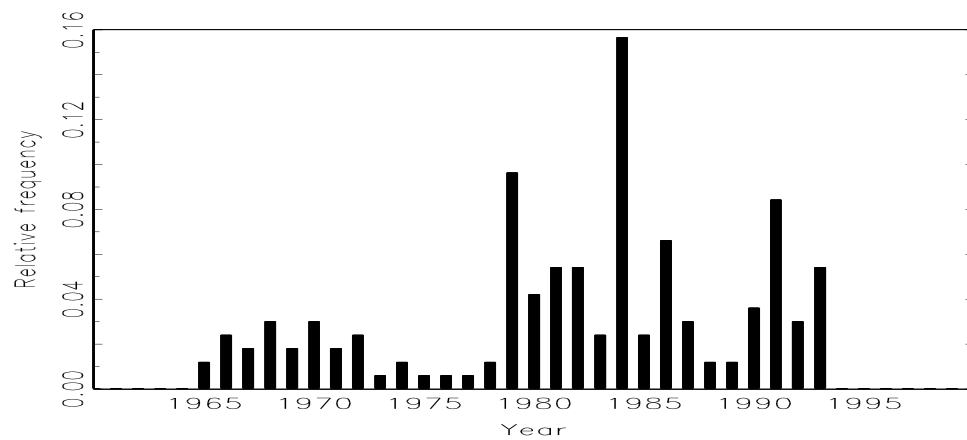


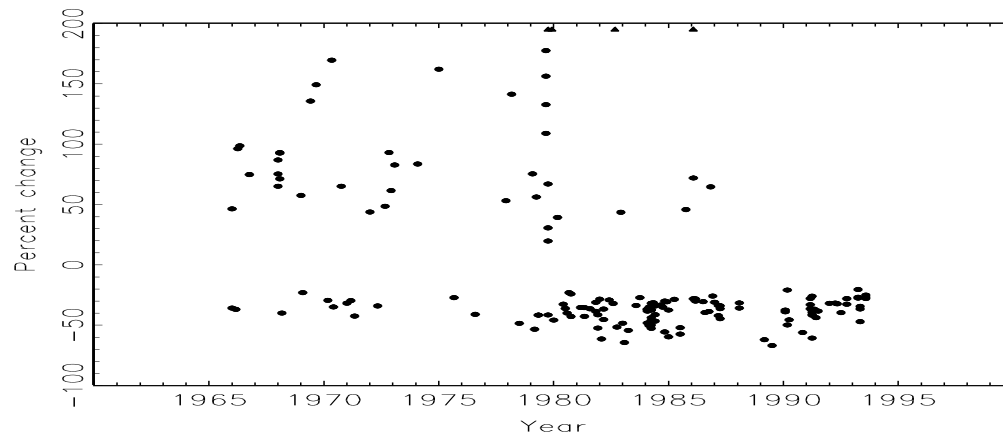
Figure 10: Scatter plots of volatility break dates against percent change in unconditional standard deviation for series for which the SupW statistic is significant at the 5% level, when assuming a nonlinear unconditional mean. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.



(a) Distribution of percent change in unconditional standard deviation



(b) Distribution of break dates



(c) Scatter of break dates against percent change in standard deviation

Figure 11: Characteristics of unconditional volatility breaks for series for which the SupW statistic is significant at the 5% level, when assuming a nonlinear unconditional mean with a single structural change during expansions. In panel (a), series for which the standard deviation more than doubles are collected in the right-most category. In panel (c), series for which the standard deviation more than triples are shown as triangles.

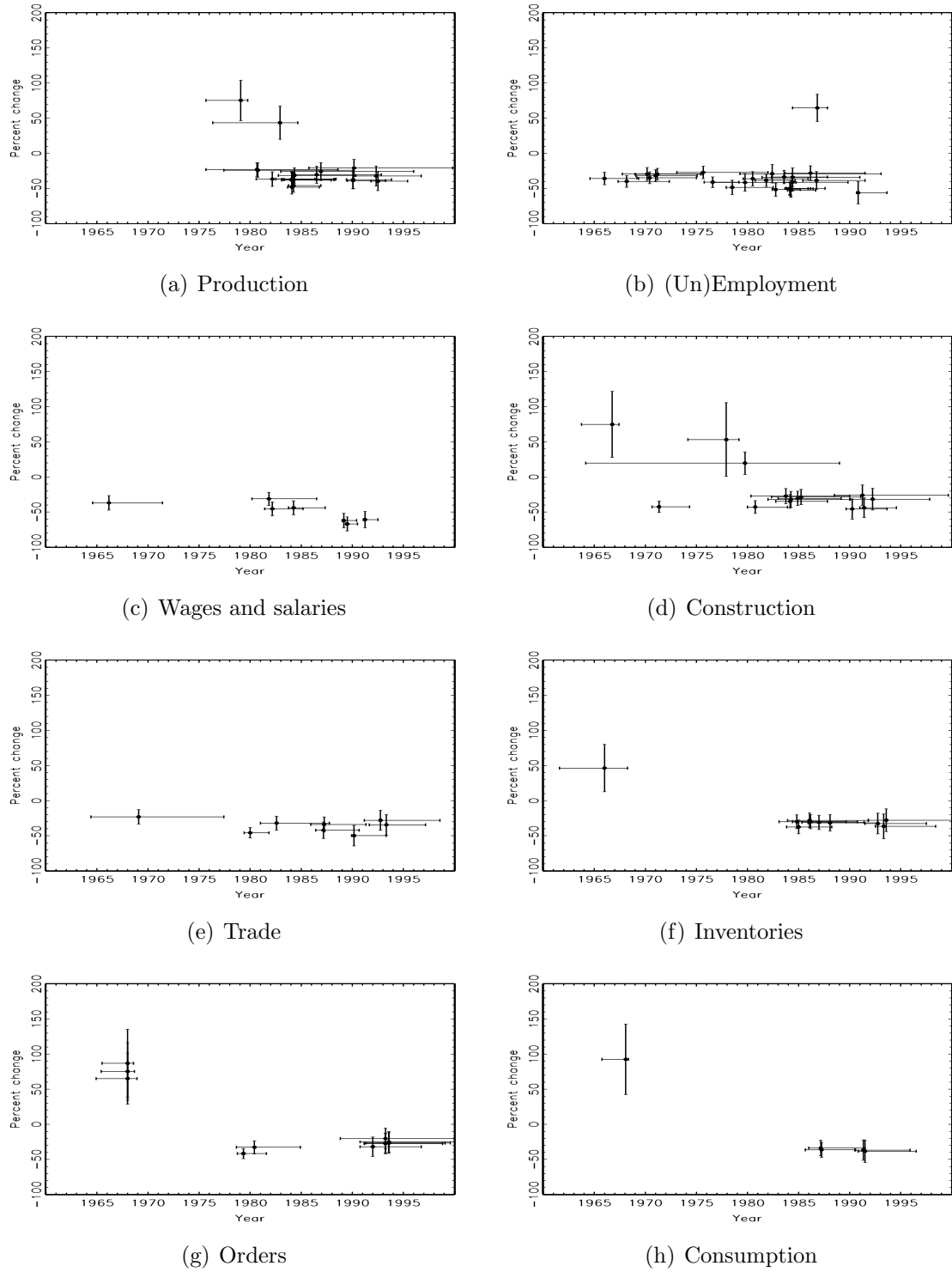


Figure 12: Scatter plots of volatility break dates against percent change in unconditional standard deviation for series for which the SupW statistic is significant at the 5% level, when assuming a nonlinear unconditional mean with a single structural change during expansions. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.

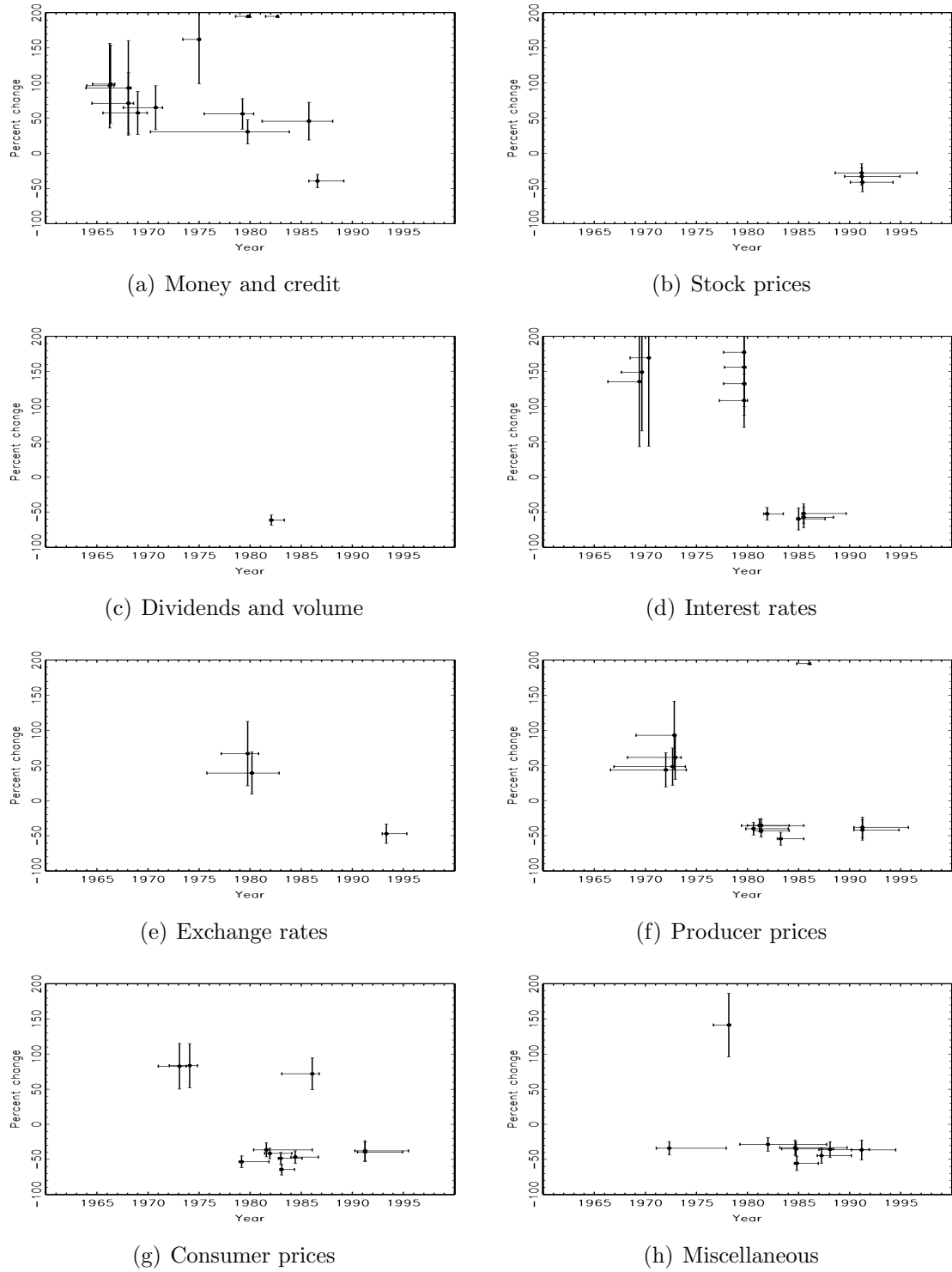
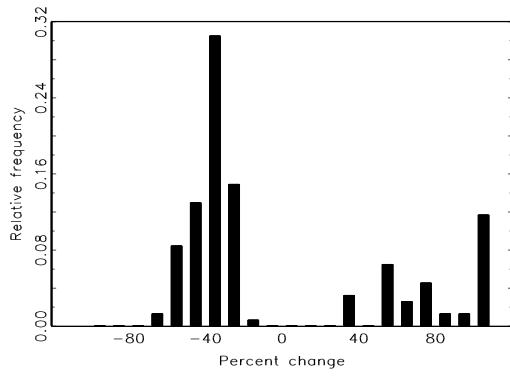
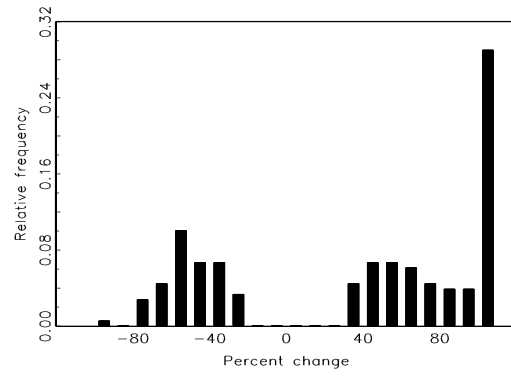


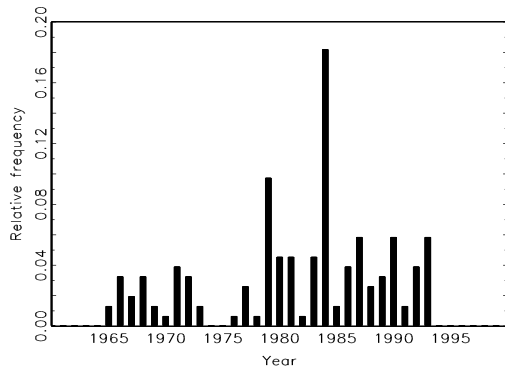
Figure 13: Scatter plots of volatility break dates against percent change in unconditional standard deviation for series for which the SupW statistic is significant at the 5% level, when assuming a nonlinear unconditional mean with a single structural change during expansions. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.



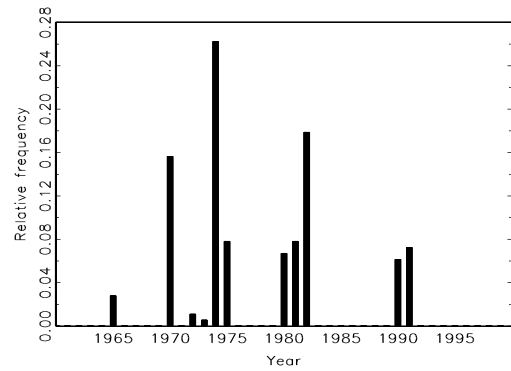
(a) Distribution of percent change in standard deviation during expansions



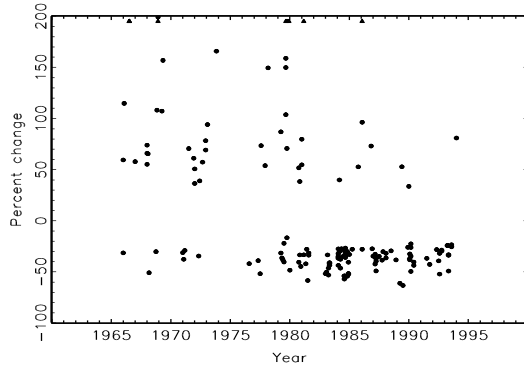
(b) Distribution of percent change in standard deviation during recessions



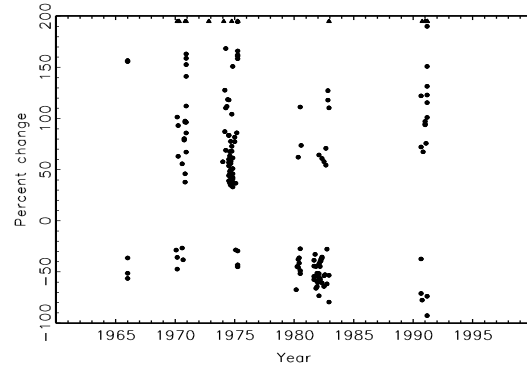
(c) Distribution of break dates for standard deviation during expansions



(d) Distribution of break dates for standard deviation during recessions



(e) Scatter of break dates against percent change in standard deviation during expansions



(f) Scatter of break dates against percent change in standard deviation during recessions

Figure 14: Characteristics of unconditional volatility breaks for series for which the SupW statistics for a structural change in the unconditional volatility in recessions and expansions separately are significant at the 5% level, when assuming a constant unconditional mean. In panels (e) and (f), series for which the standard deviation more than triples are shown as triangles.

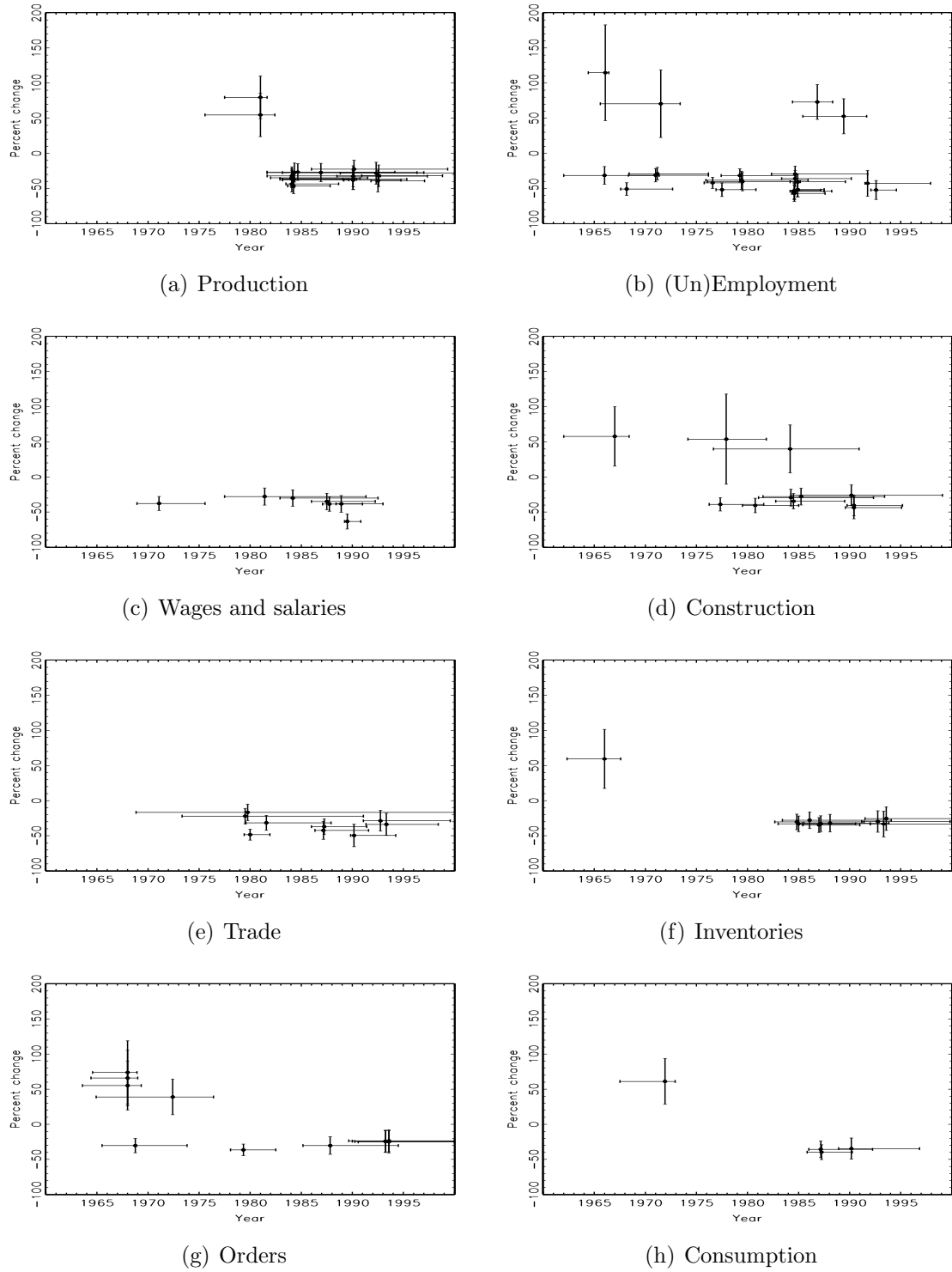
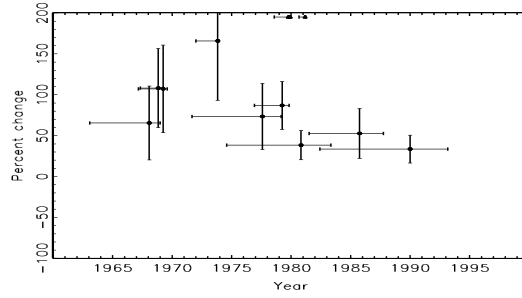
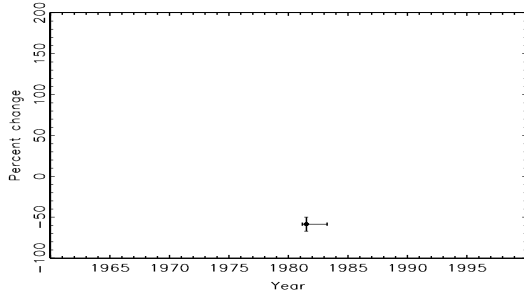


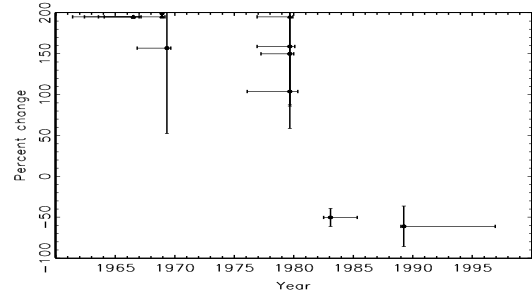
Figure 15: Scatter plots of volatility break dates against percent change in unconditional standard deviation during expansions for series for which the SupW statistic for a structural change in the unconditional volatility in expansions only is significant at the 5% level, when assuming a constant unconditional mean. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.



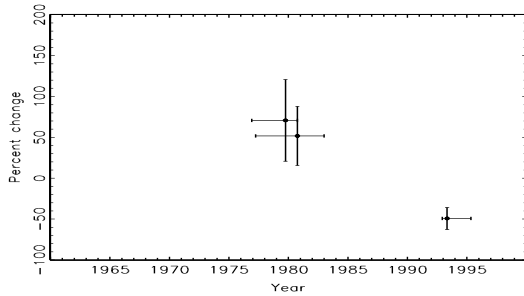
(a) Money and credit



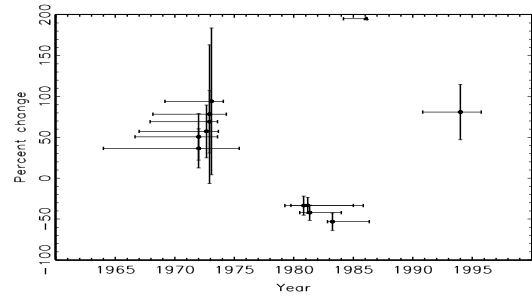
(b) Dividends and volume



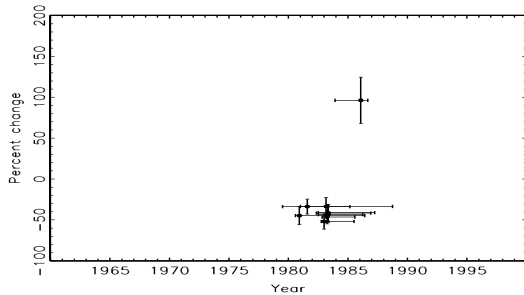
(c) Interest rates



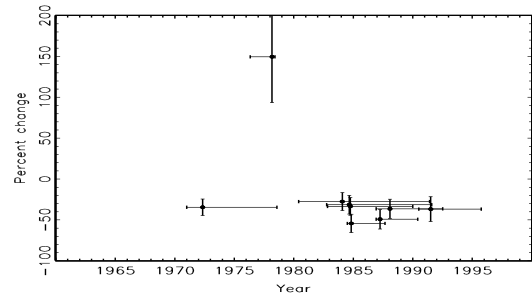
(d) Exchange rates



(e) Producer prices



(f) Consumer prices



(g) Miscellaneous

Figure 16: Scatter plots of volatility break dates against percent change in unconditional standard deviation during expansions for series for which the SupW statistic for a structural change in the unconditional volatility in expansions only is significant at the 5% level, when assuming a constant unconditional mean. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.

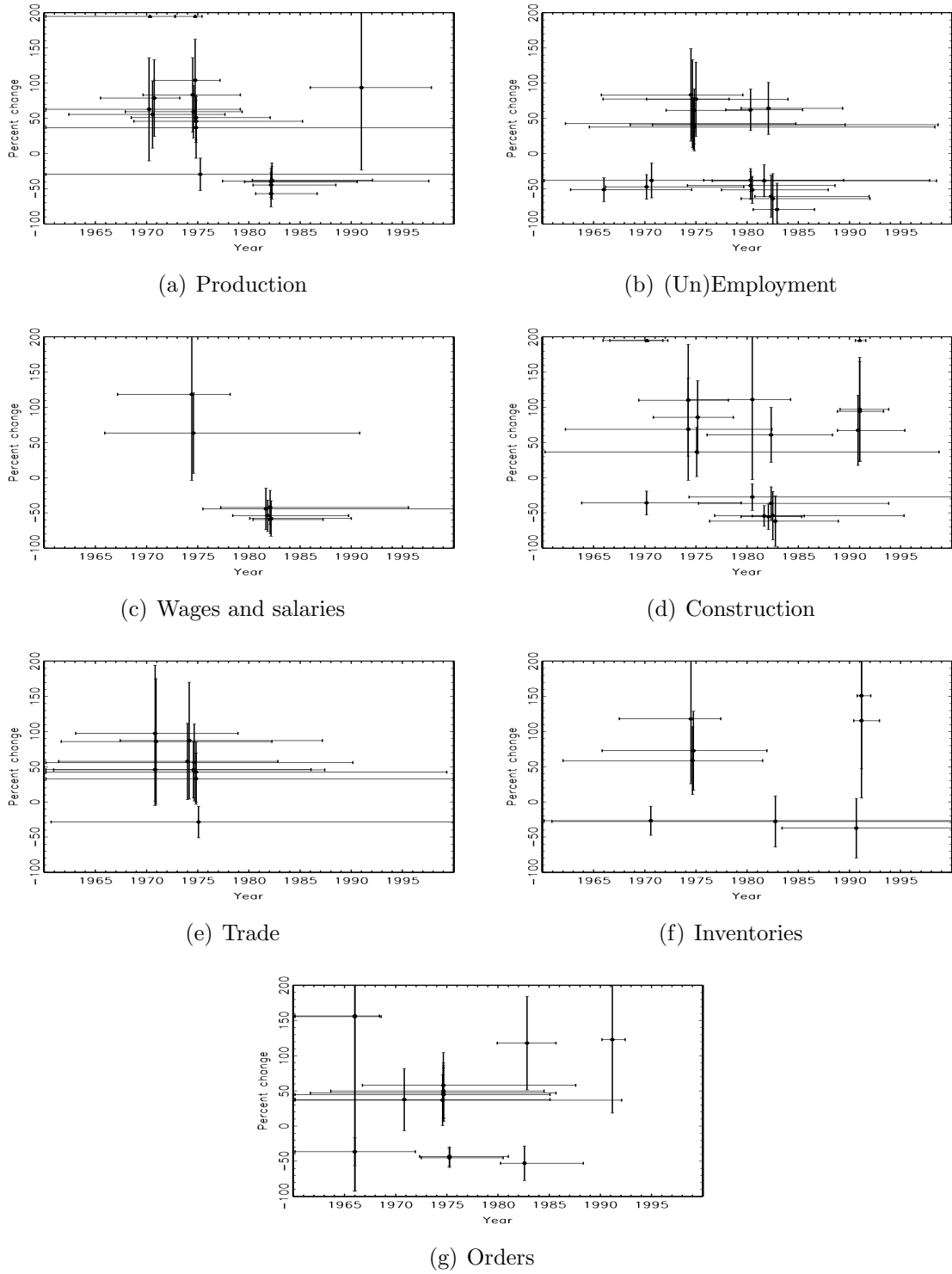


Figure 17: Scatter plots of volatility break dates against percent change in unconditional standard deviation during recessions for series for which the SupW statistic for a structural change in the unconditional volatility in expansions only is significant at the 5% level, when assuming a constant unconditional mean. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.

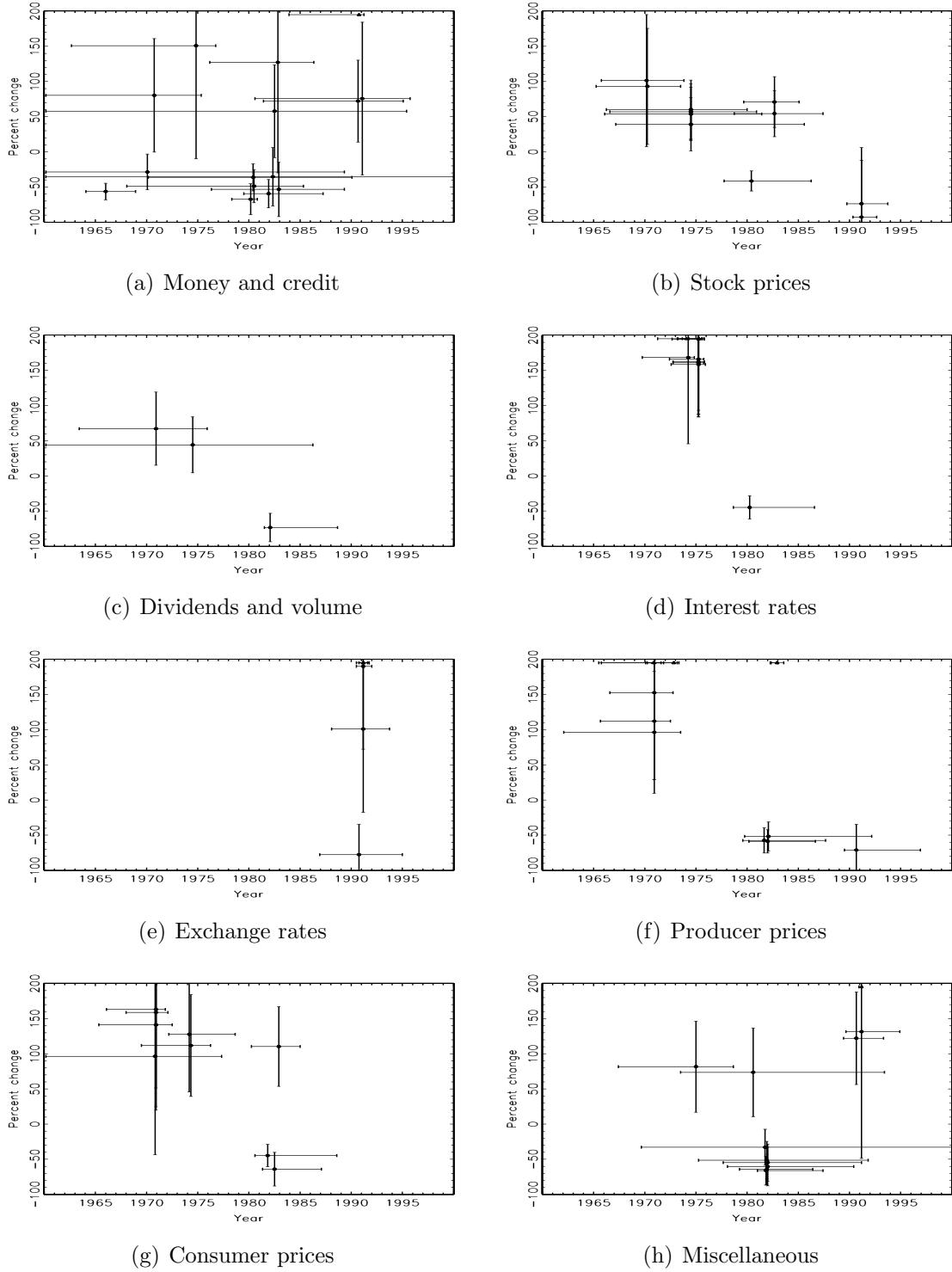
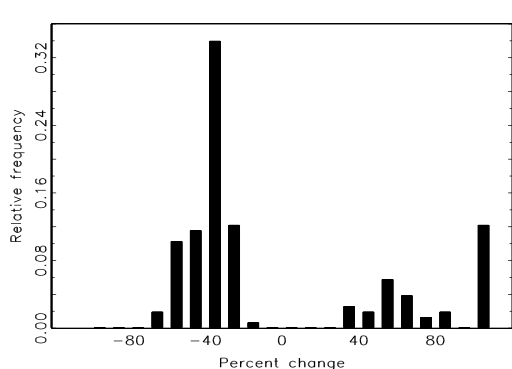
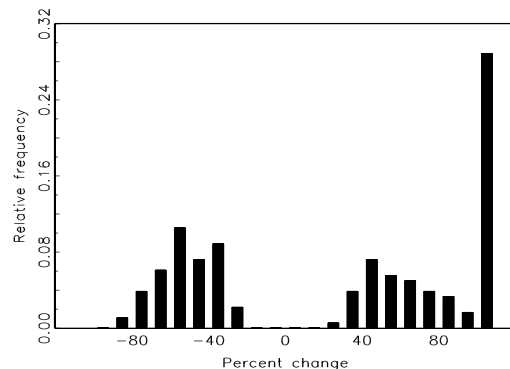


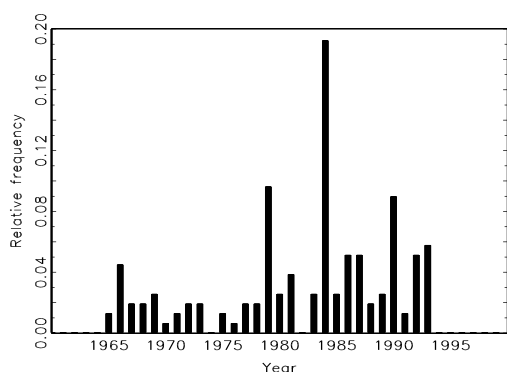
Figure 18: Scatter plots of volatility break dates against percent change in unconditional standard deviation during recessions for series for which the SupW statistic for a structural change in the unconditional volatility in expansions only is significant at the 5% level, when assuming a constant unconditional mean. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.



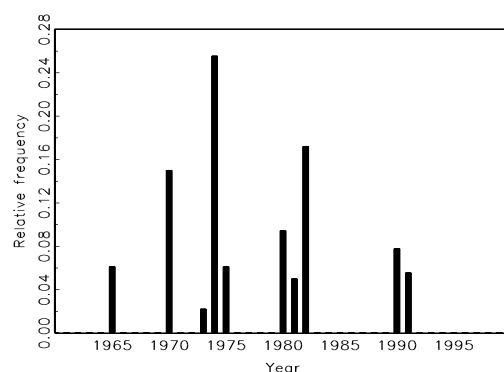
(a) Distribution of percent change in standard deviation during expansions



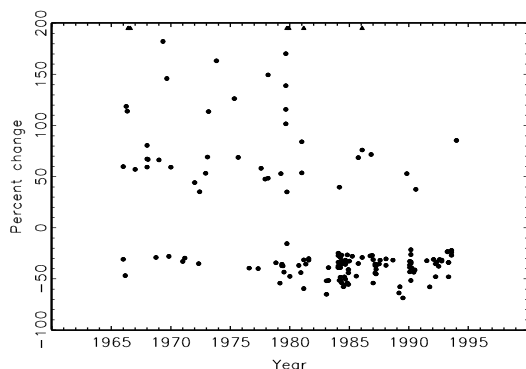
(b) Distribution of percent change in standard deviation during recessions



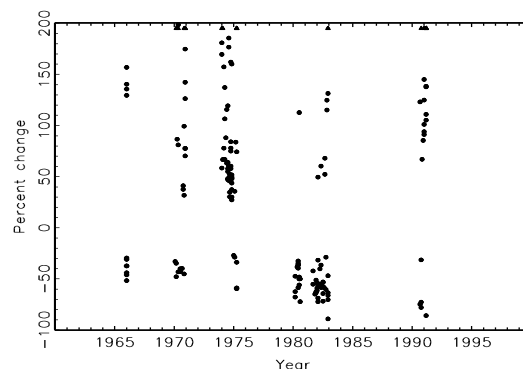
(c) Distribution of break dates for standard deviation during expansions



(d) Distribution of break dates for standard deviation during recessions



(e) Scatter of break dates against percent change in standard deviation during expansions



(f) Scatter of break dates against percent change in standard deviation during recessions

Figure 19: Characteristics of unconditional volatility breaks for series for which the SupW statistics for a structural change in the unconditional volatility in recessions and expansions separately are significant at the 5% level, when assuming a single structural change in the unconditional mean. In panels (e) and (f), series for which the standard deviation more than triples are shown as triangles.

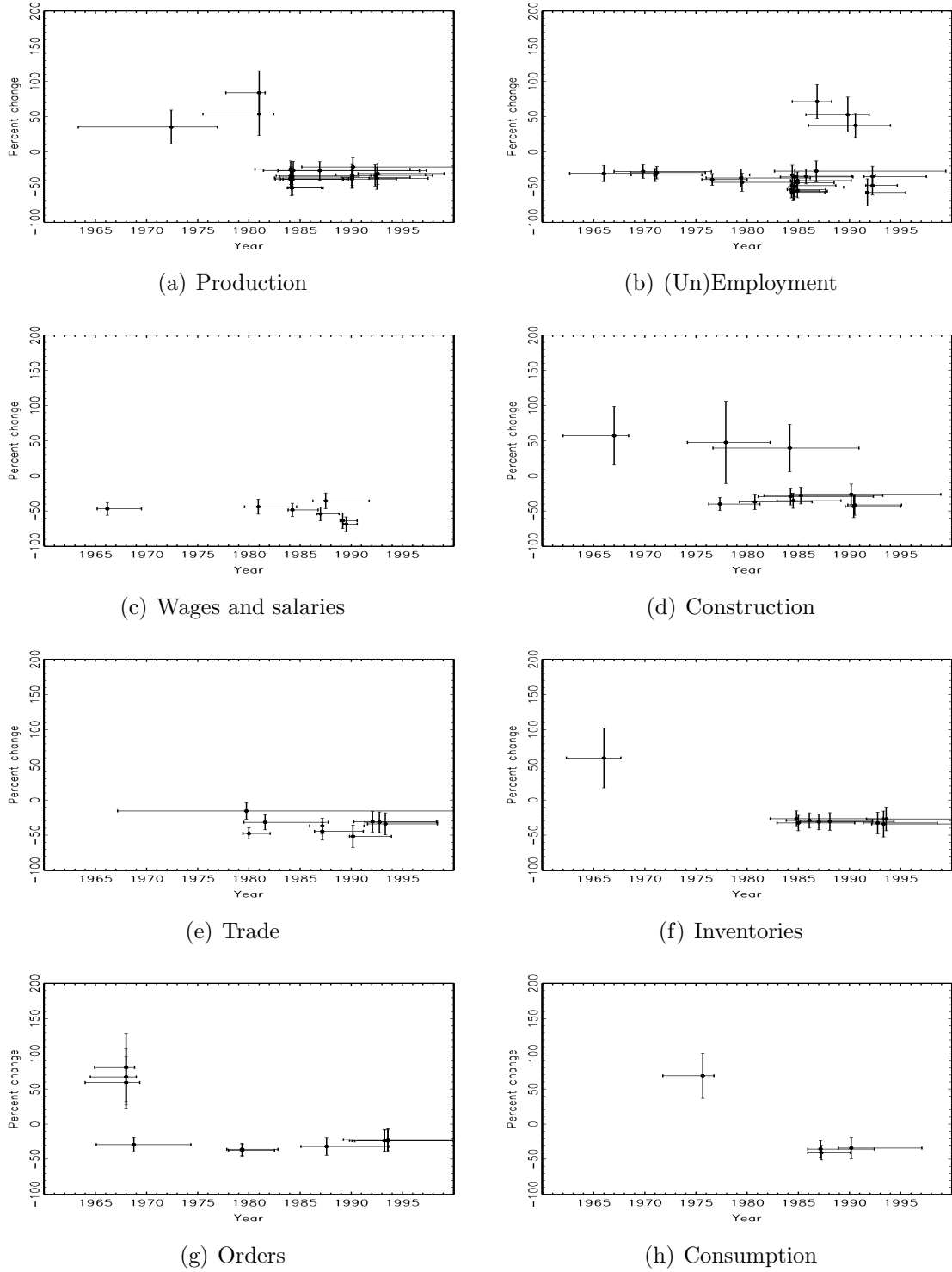
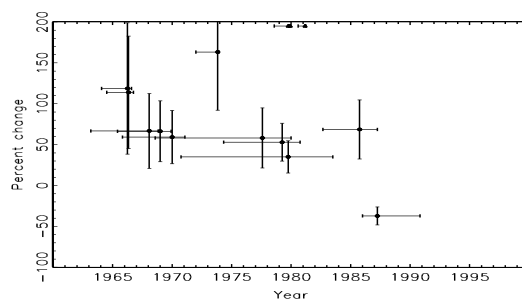
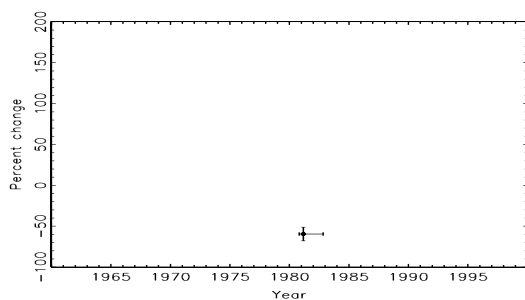


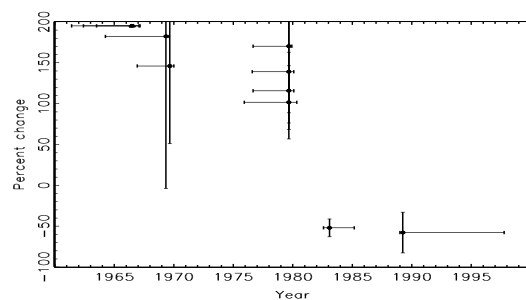
Figure 20: Scatter plots of volatility break dates against percent change in unconditional standard deviation during expansions for series for which the SupW statistic for a structural change in the unconditional volatility in expansions only is significant at the 5% level, when assuming a single structural change in the unconditional mean. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.



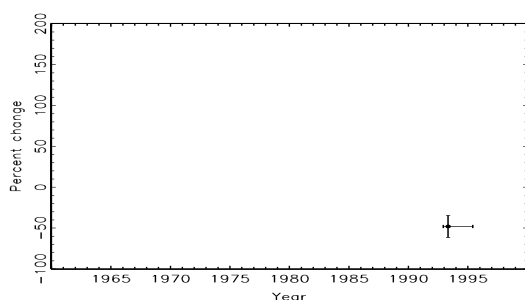
(a) Money and credit



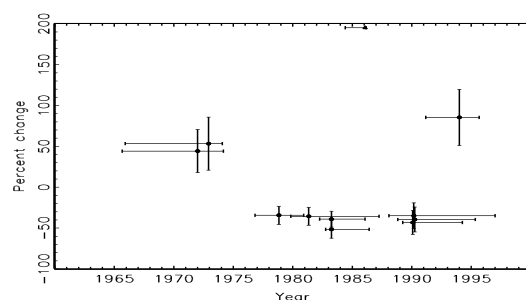
(b) Dividends and volume



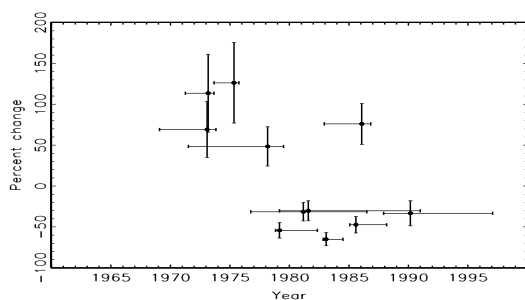
(c) Interest rates



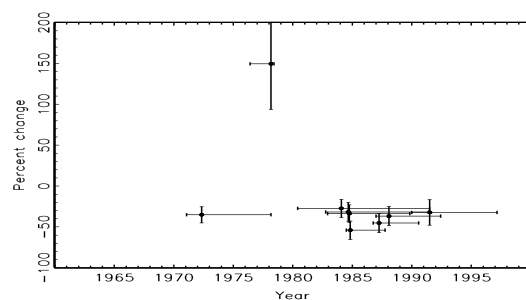
(d) Exchange rates



(e) Producer prices



(f) Consumer prices



(g) Miscellaneous

Figure 21: Scatter plots of volatility break dates against percent change in unconditional standard deviation during expansions for series for which the SupW statistic for a structural change in the unconditional volatility in expansions only is significant at the 5% level, when assuming a single structural change in the unconditional mean. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.

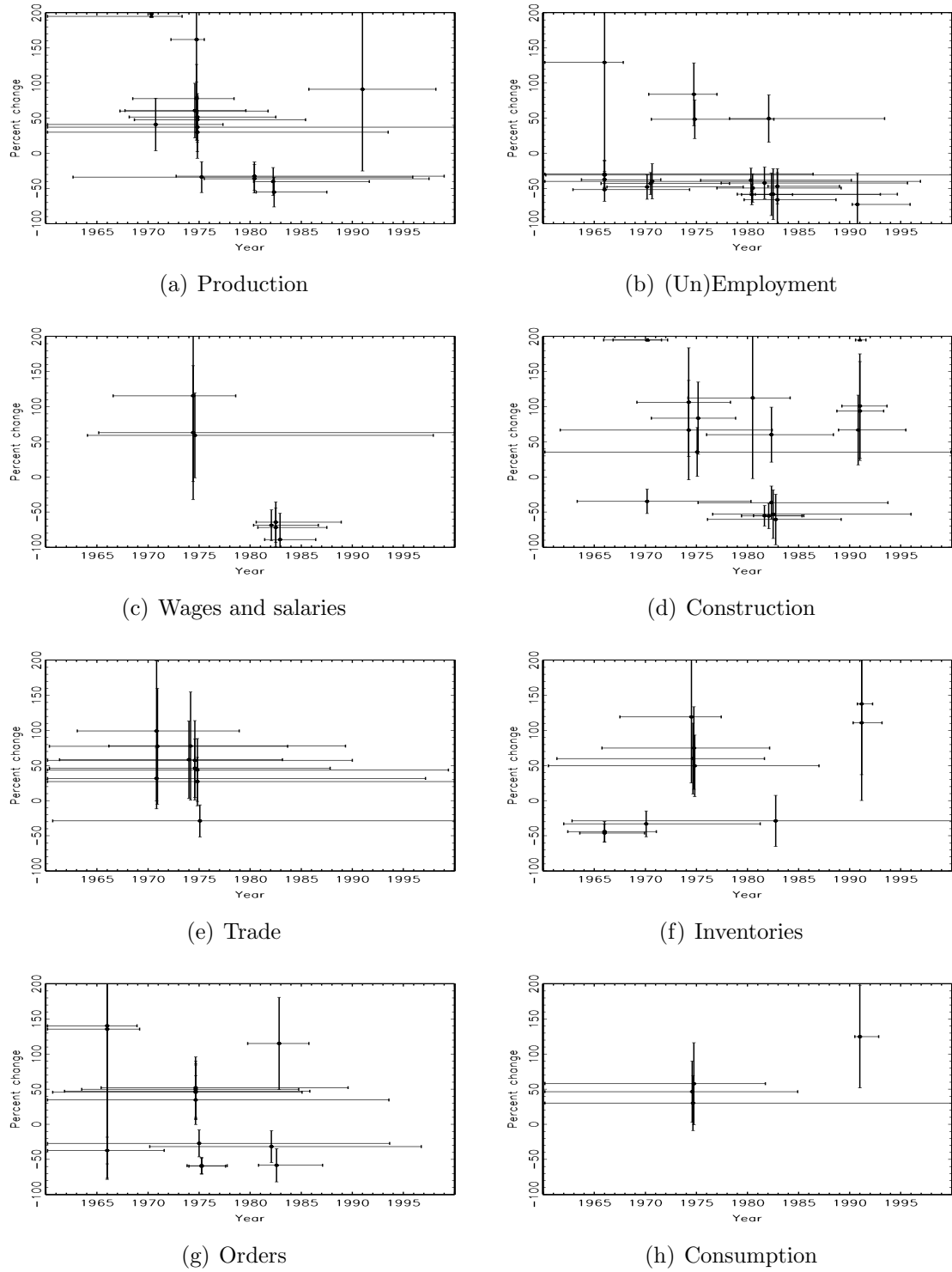


Figure 22: Scatter plots of volatility break dates against percent change in unconditional standard deviation during recessions for series for which the SupW statistic for a structural change in the unconditional volatility in expansions only is significant at the 5% level, when assuming a single structural change in the unconditional mean. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.

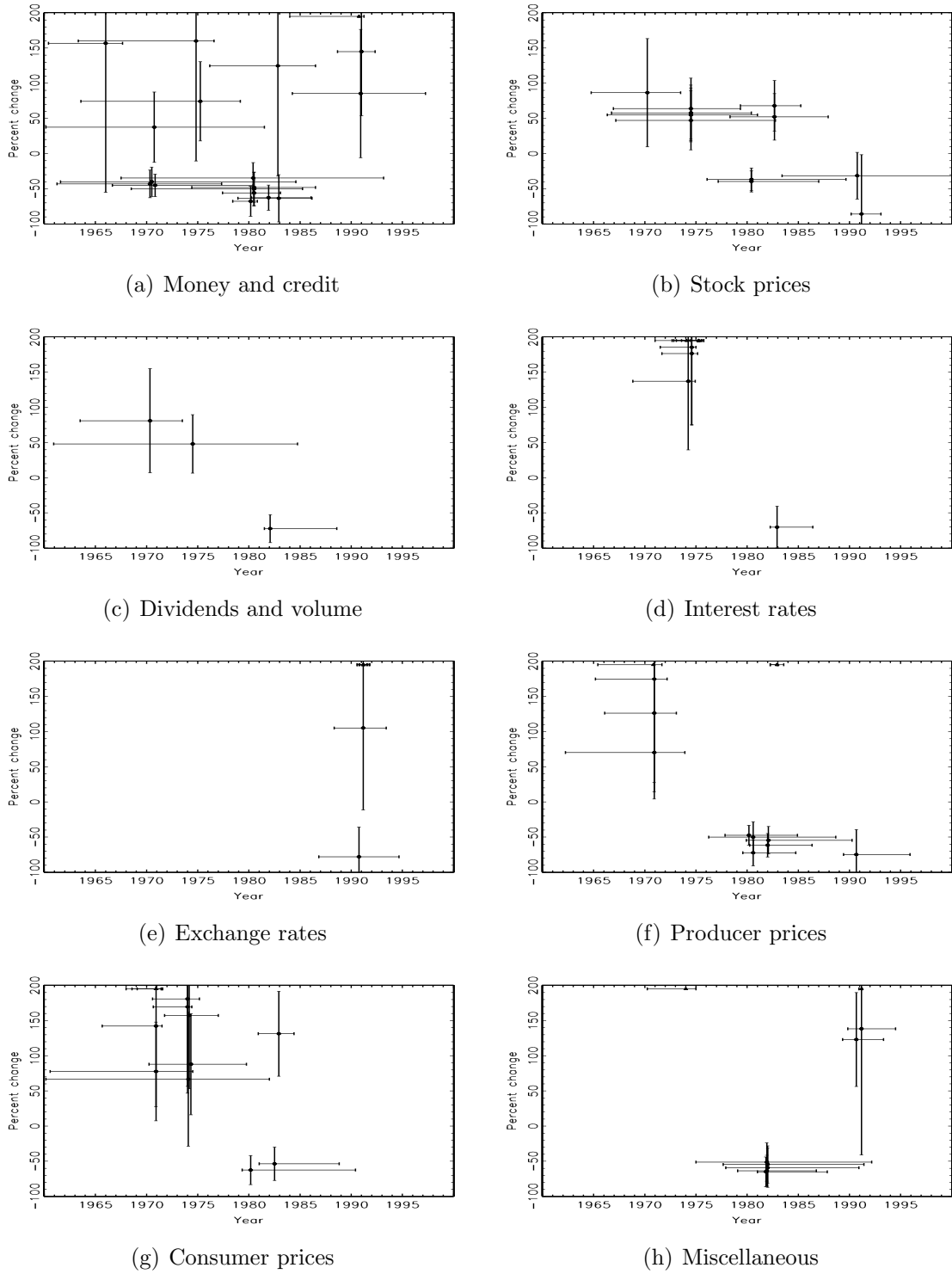
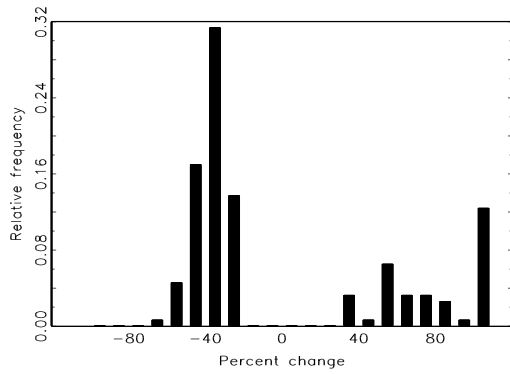
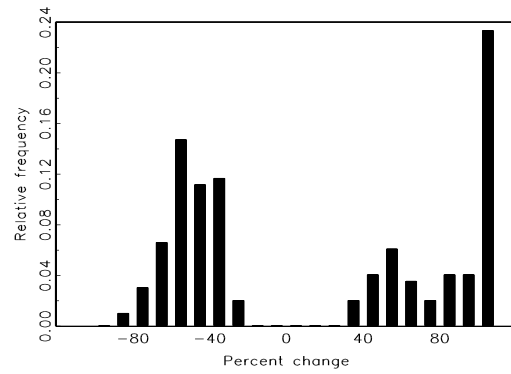


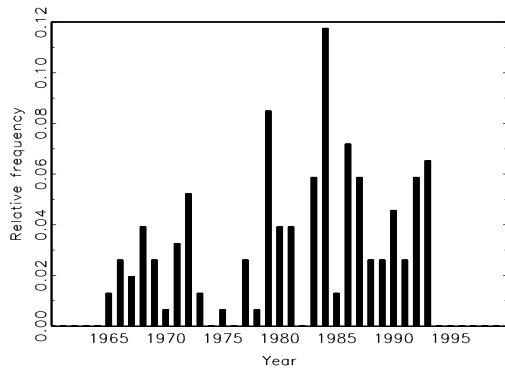
Figure 23: Scatter plots of volatility break dates against percent change in unconditional standard deviation during recessions for series for which the SupW statistic for a structural change in the unconditional volatility in expansions only is significant at the 5% level, when assuming a single structural change in the unconditional mean. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.



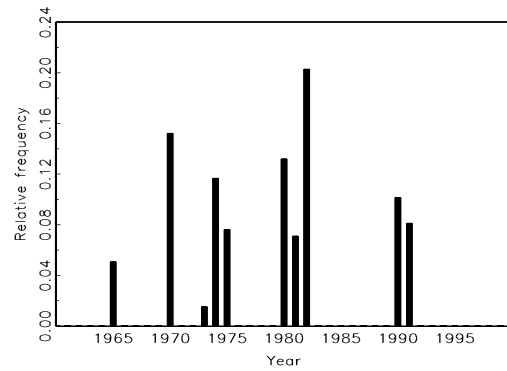
(a) Distribution of percent change in standard deviation during expansions



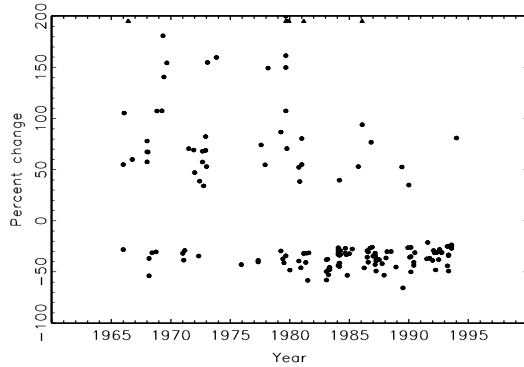
(b) Distribution of percent change in standard deviation during recessions



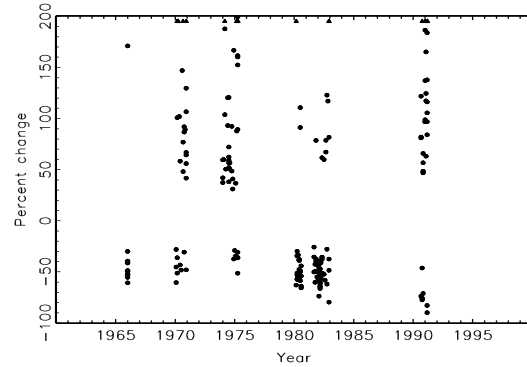
(c) Distribution of break dates for standard deviation during expansions



(d) Distribution of break dates for standard deviation during recessions



(e) Scatter of break dates against percent change in standard deviation during expansions



(f) Scatter of break dates against percent change in standard deviation during recessions

Figure 24: Characteristics of unconditional volatility breaks for series for which the SupW statistics for a structural change in the unconditional volatility in recessions and expansions separately are significant at the 5% level, when assuming a nonlinear unconditional mean. In panels (e) and (f), series for which the standard deviation more than triples are shown as triangles.

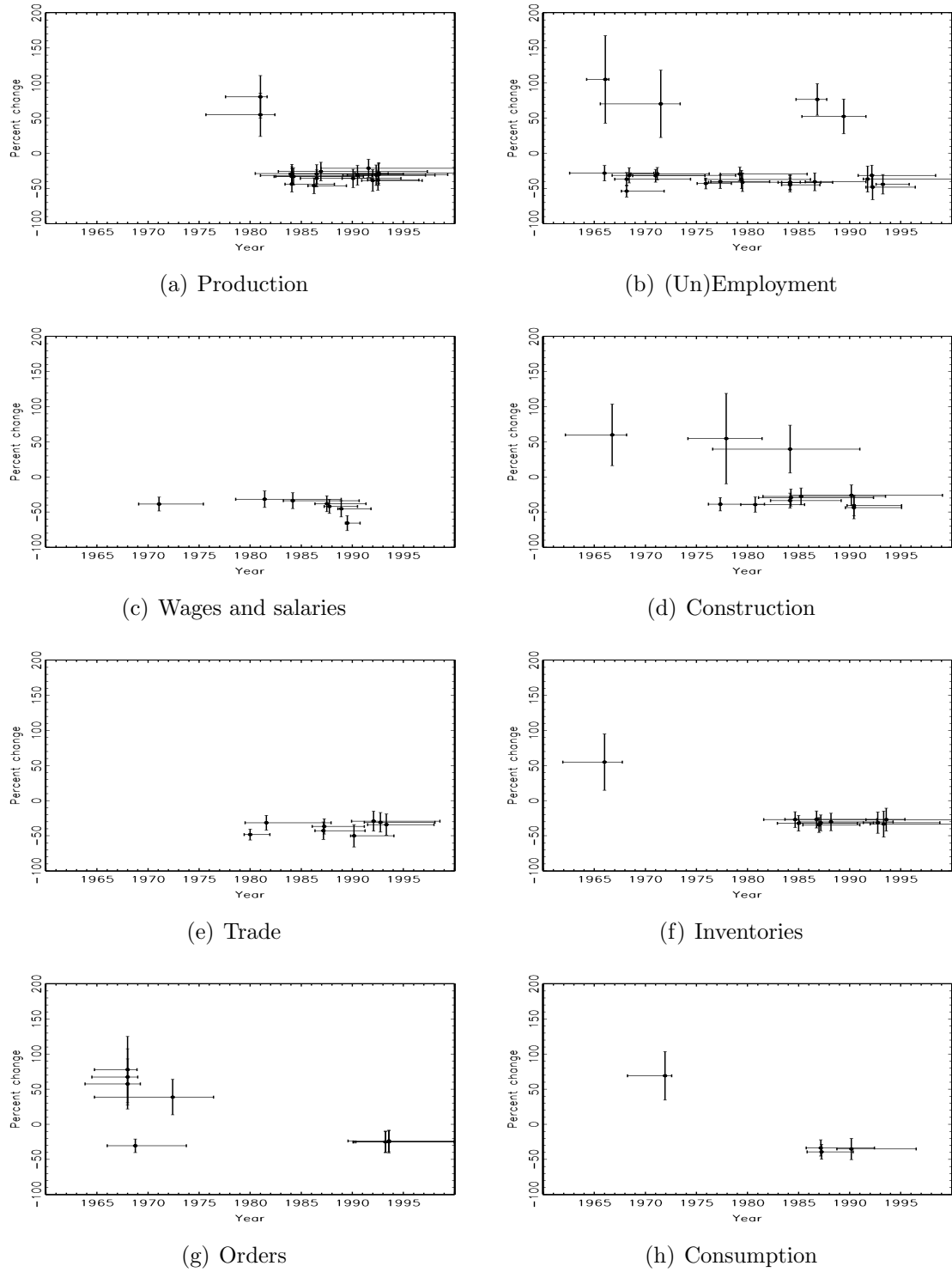
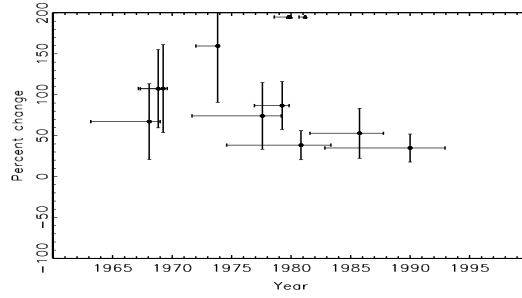
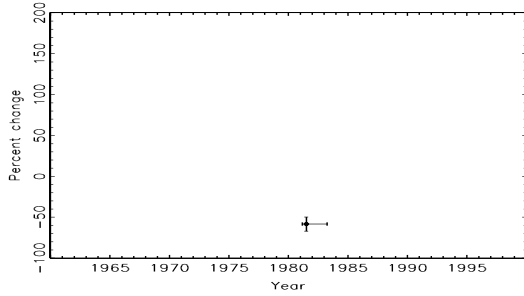


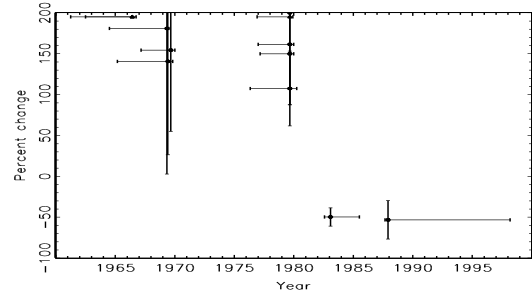
Figure 25: Scatter plots of volatility break dates against percent change in unconditional standard deviation during expansions for series for which the SupW statistic for a structural change in the unconditional volatility in expansions only is significant at the 5% level, when assuming a nonlinear unconditional mean. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.



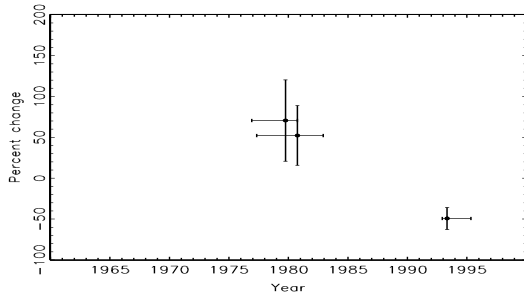
(a) Money and credit



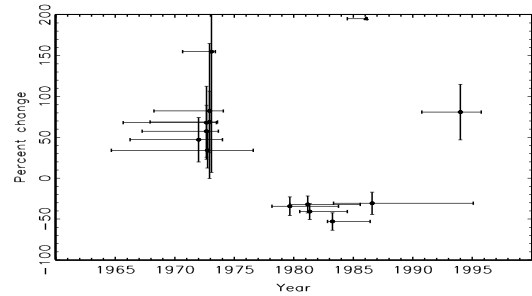
(b) Dividends and volume



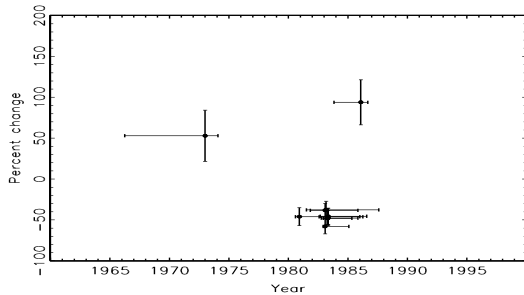
(c) Interest rates



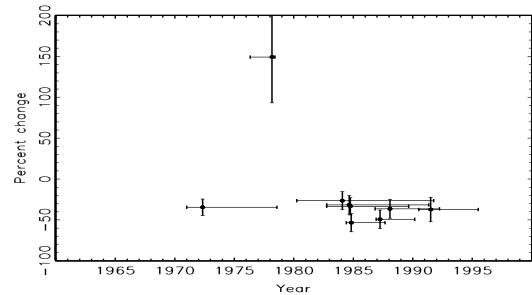
(d) Exchange rates



(e) Producer prices



(f) Consumer prices



(g) Miscellaneous

Figure 26: Scatter plots of volatility break dates against percent change in unconditional standard deviation during expansions for series for which the SupW statistic for a structural change in the unconditional volatility in expansions only is significant at the 5% level, when assuming a nonlinear unconditional mean. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.

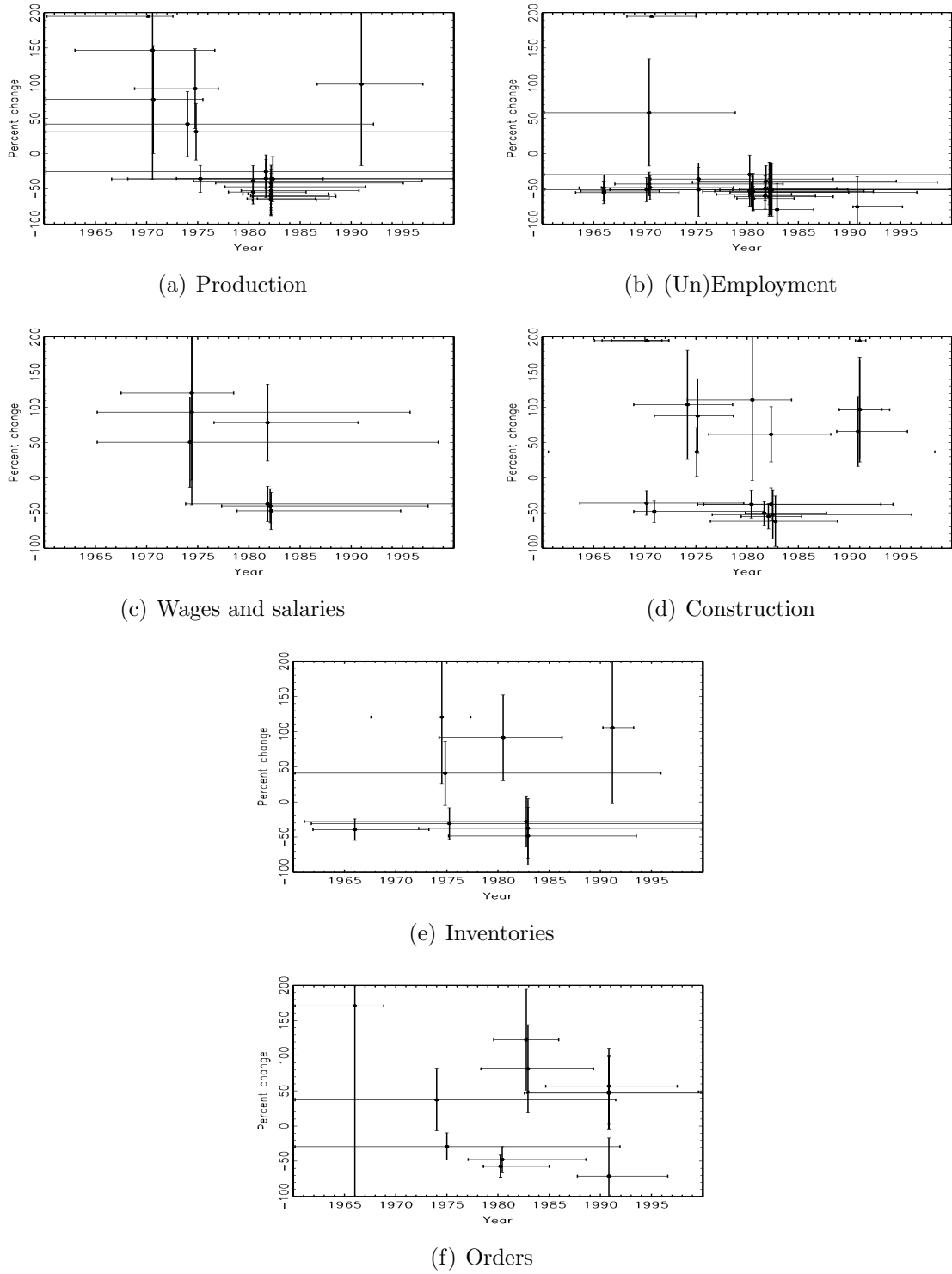


Figure 27: Scatter plots of volatility break dates against percent change in unconditional standard deviation during recessions for series for which the SupW statistic for a structural change in the unconditional volatility in expansions only is significant at the 5% level, when assuming a nonlinear unconditional mean. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.

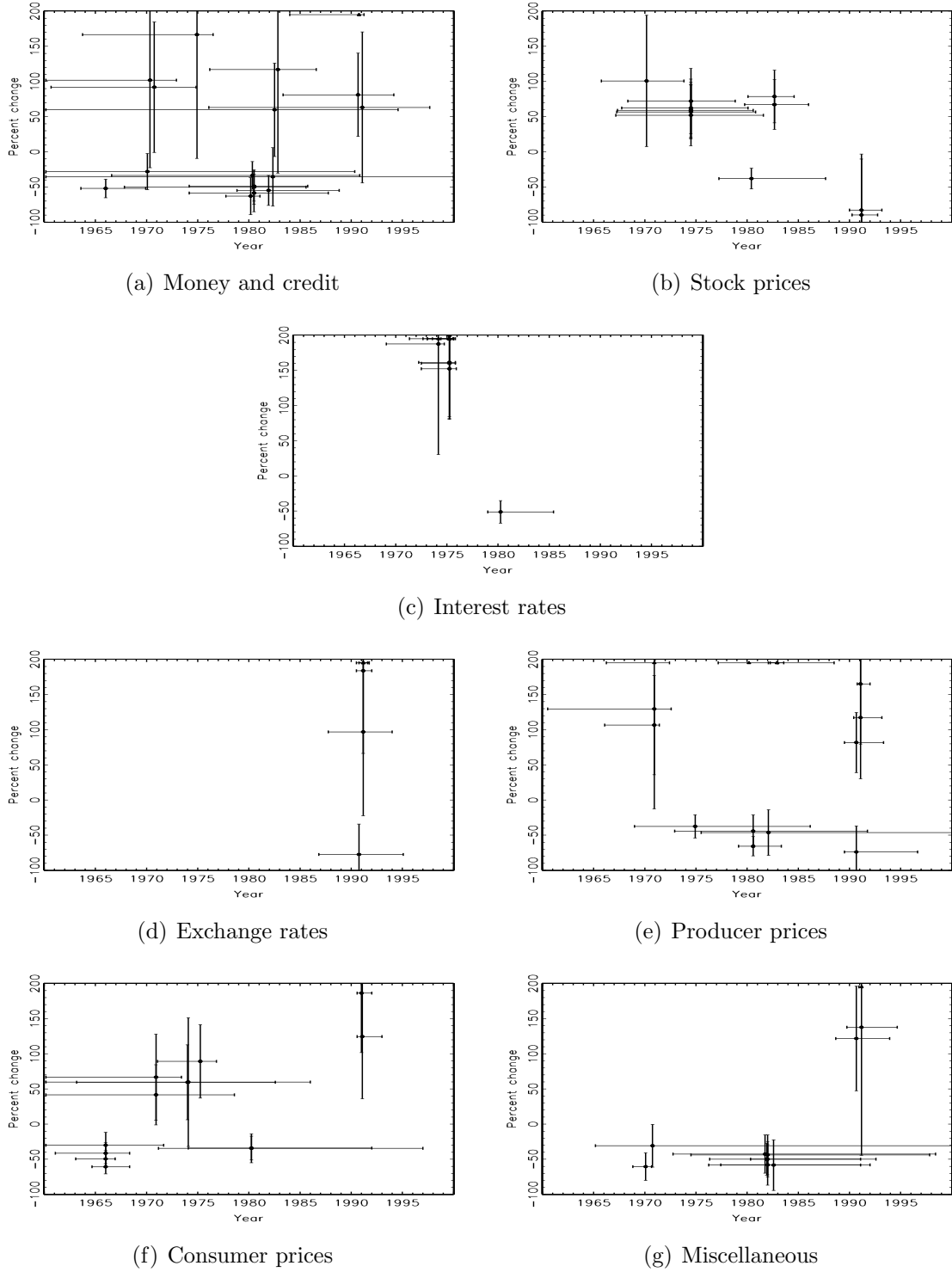
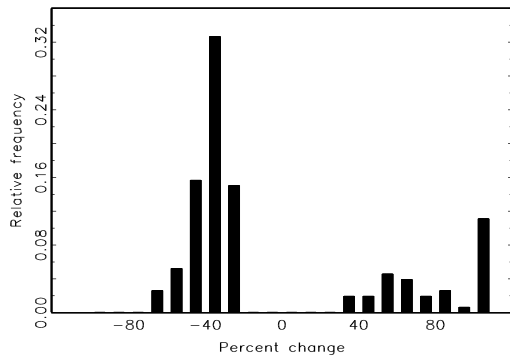
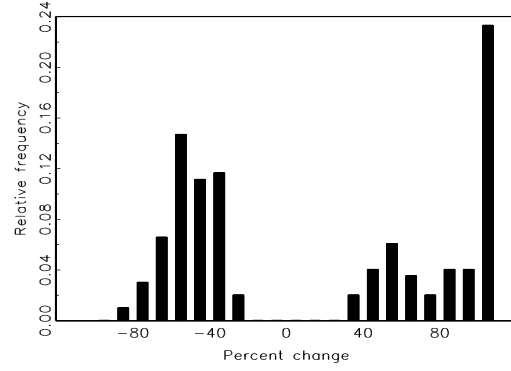


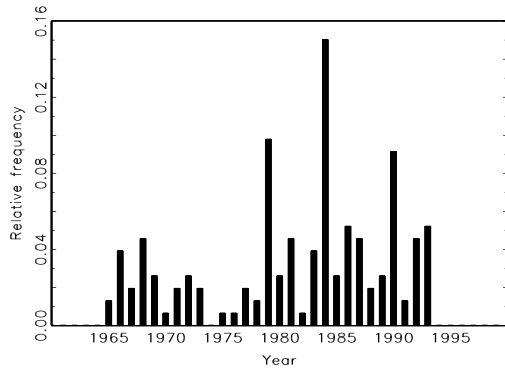
Figure 28: Scatter plots of volatility break dates against percent change in unconditional standard deviation during recessions for series for which the SupW statistic for a structural change in the unconditional volatility in expansions only is significant at the 5% level, when assuming a nonlinear unconditional mean. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.



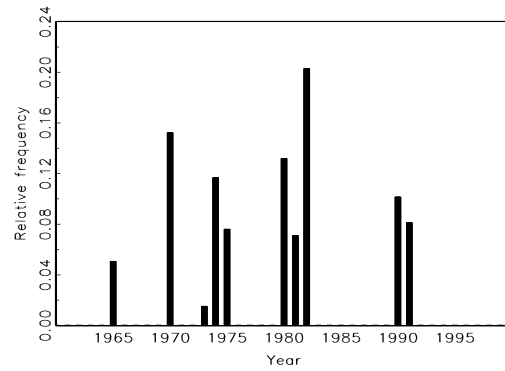
(a) Distribution of percent change in standard deviation during expansions



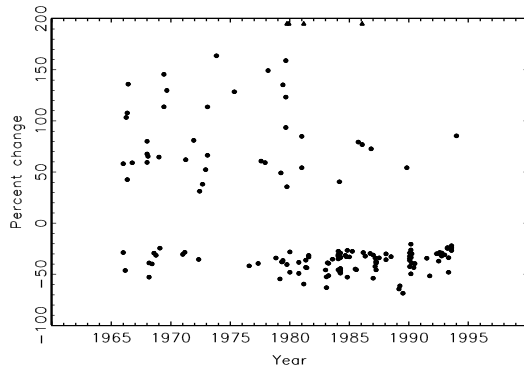
(b) Distribution of percent change in standard deviation during recessions



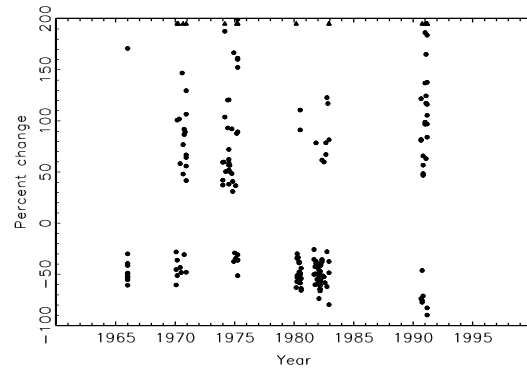
(c) Distribution of break dates for standard deviation during expansions



(d) Distribution of break dates for standard deviation during recessions



(e) Scatter of break dates against percent change in standard deviation during expansions



(f) Scatter of break dates against percent change in standard deviation during recessions

Figure 29: Characteristics of unconditional volatility breaks for series for which the SupW statistics for a structural change in the unconditional volatility in recessions and expansions separately are significant at the 5% level, when assuming a nonlinear unconditional mean with structural change during expansions. In panels (a) and (b), series for which the standard deviation more than doubles are collected in the right-most category. In panels (e) and (f), series for which the standard deviation more than triples are shown as triangles.

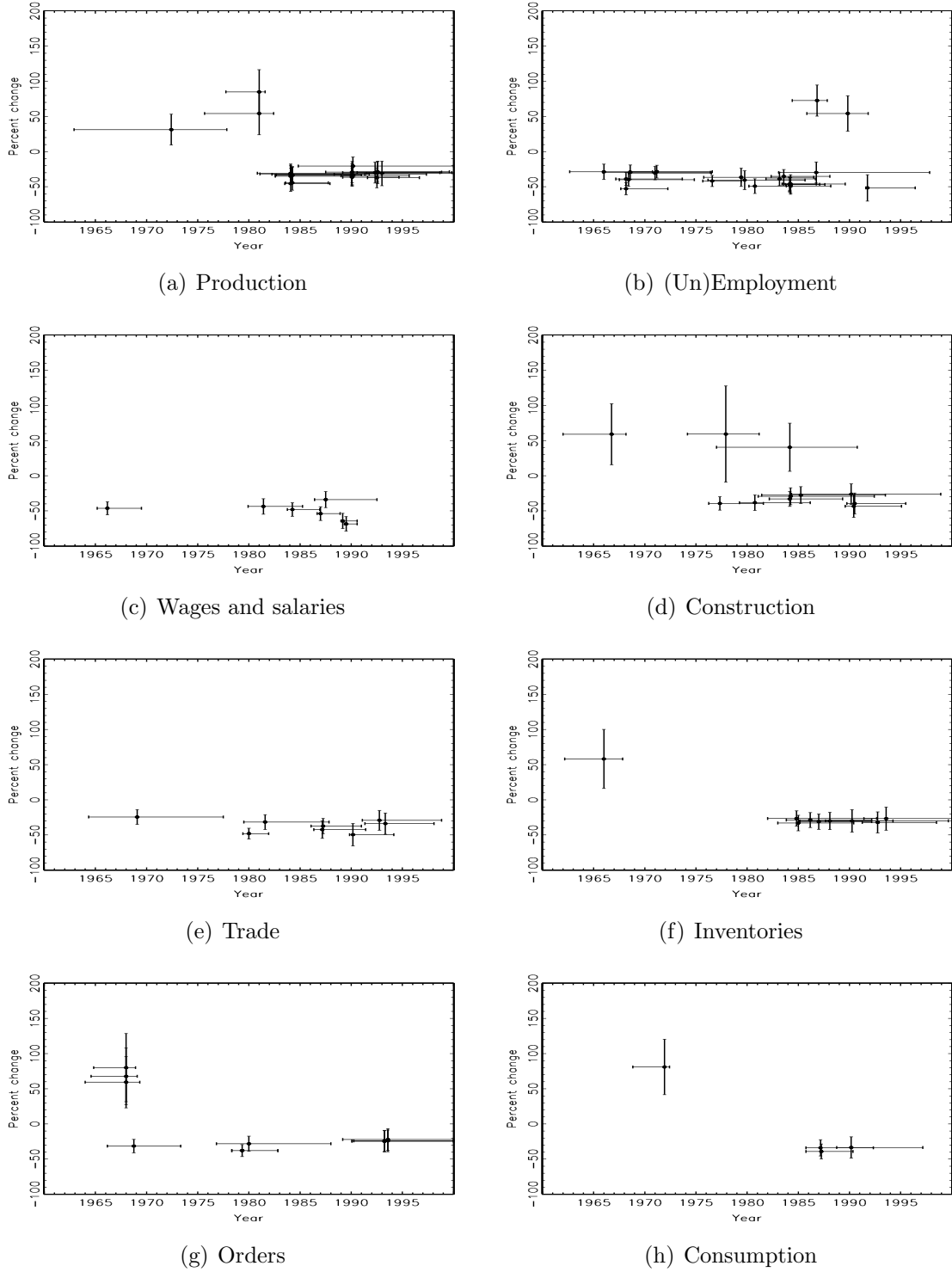
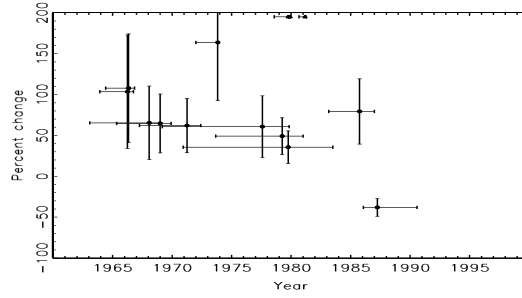
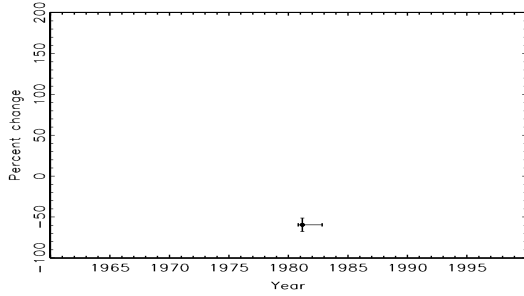


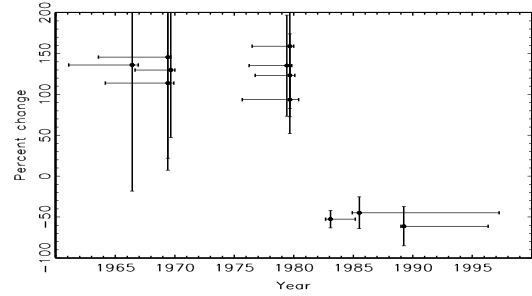
Figure 30: Scatter plots of volatility break dates against percent change in unconditional standard deviation during expansions for series for which the SupW statistic for a structural change in the unconditional volatility in expansions only is significant at the 5% level, when assuming a nonlinear unconditional mean with structural change during expansions. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.



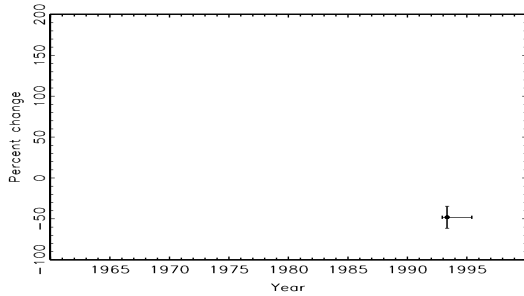
(a) Money and credit



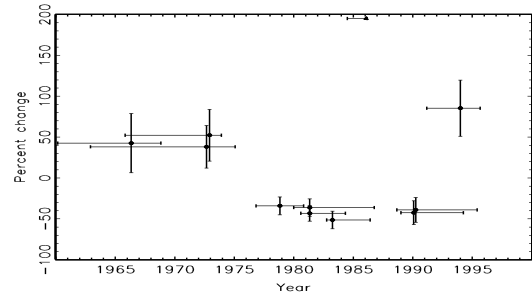
(b) Dividends and volume



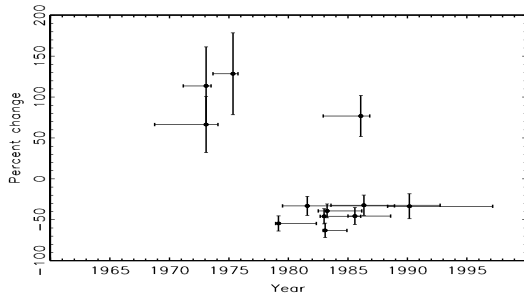
(c) Interest rates



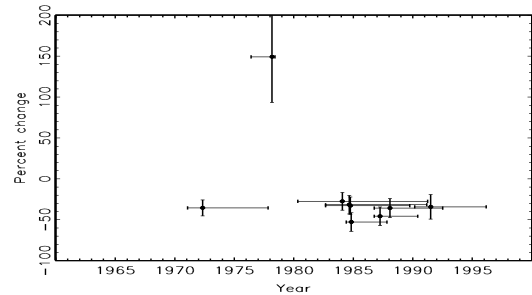
(d) Exchange rates



(e) Producer prices



(f) Consumer prices



(g) Miscellaneous

Figure 31: Scatter plots of volatility break dates against percent change in unconditional standard deviation during expansions for series for which the SupW statistic for a structural change in the unconditional volatility in expansions only is significant at the 5% level, when assuming a nonlinear unconditional mean with structural change during expansions. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.

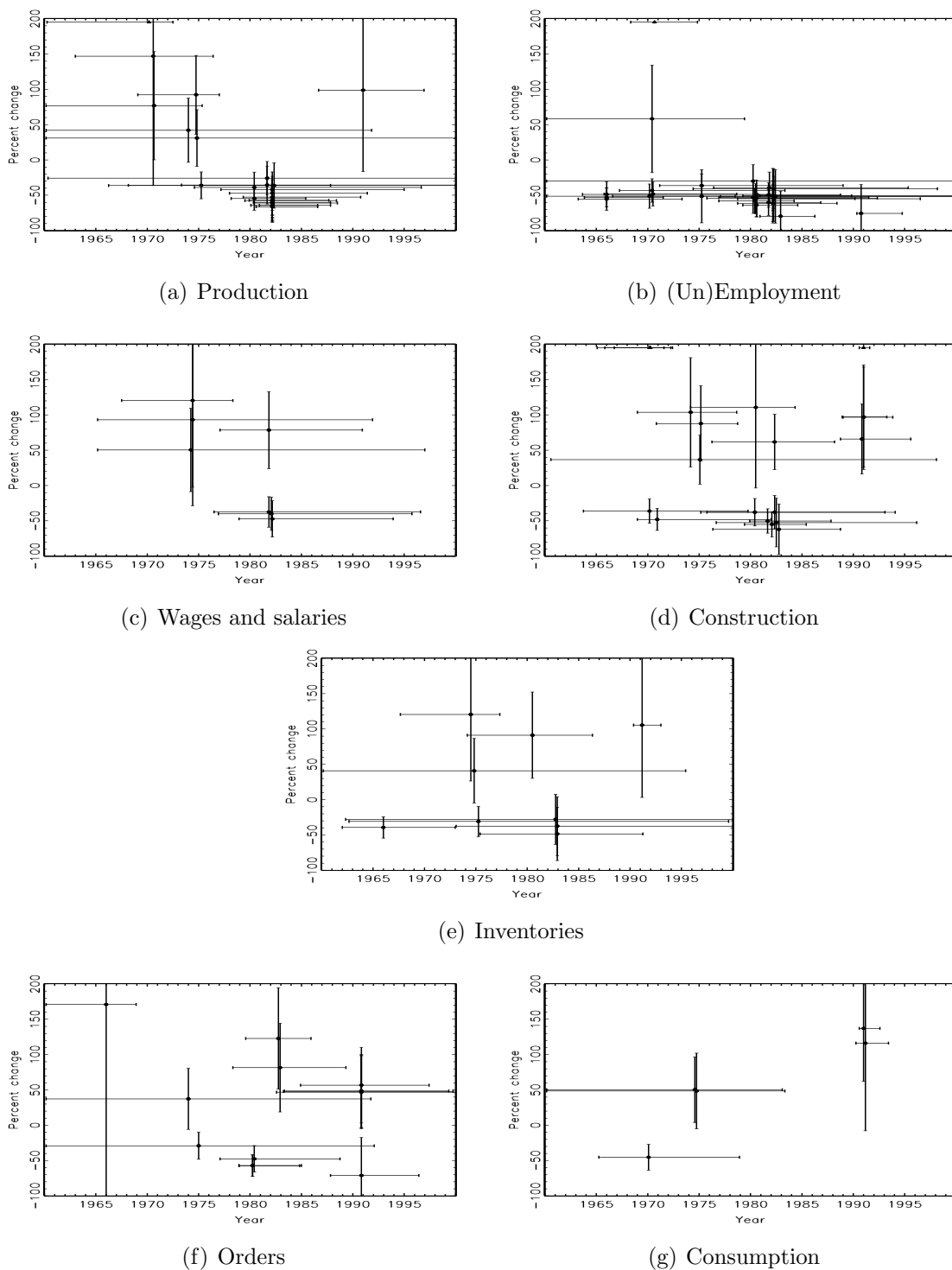
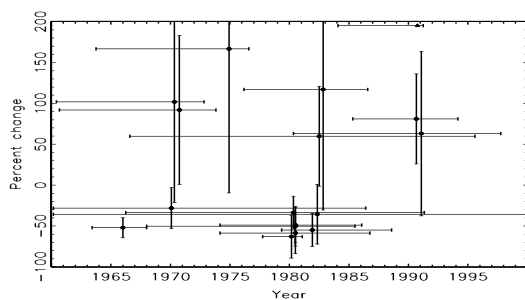
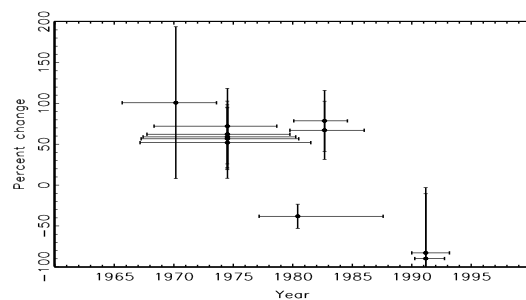


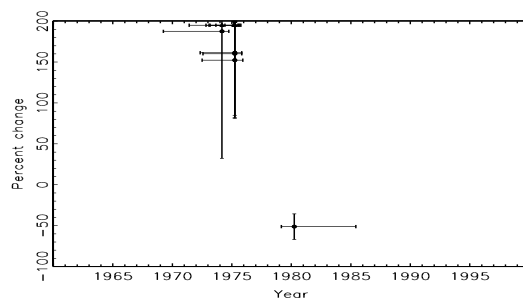
Figure 32: Scatter plots of volatility break dates against percent change in unconditional standard deviation during recessions for series for which the SupW statistic for a structural change in the unconditional volatility in expansions only is significant at the 5% level, when assuming a nonlinear unconditional mean with structural change during expansions. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.



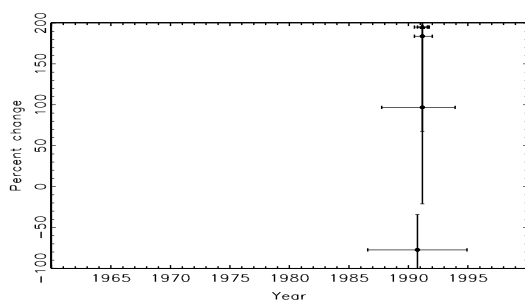
(a) Money and credit



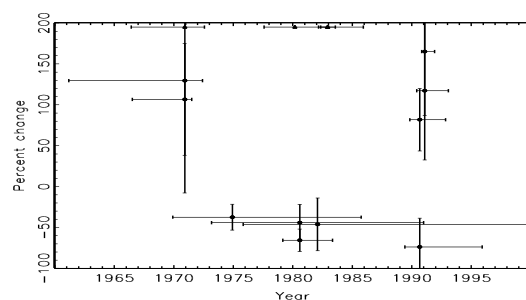
(b) Stock prices



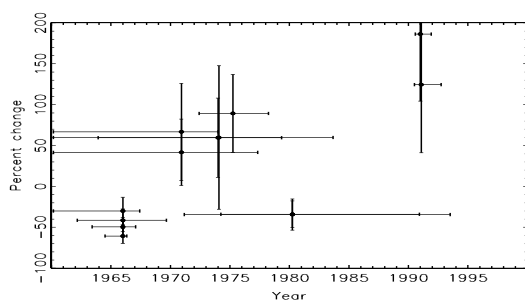
(c) Interest rates



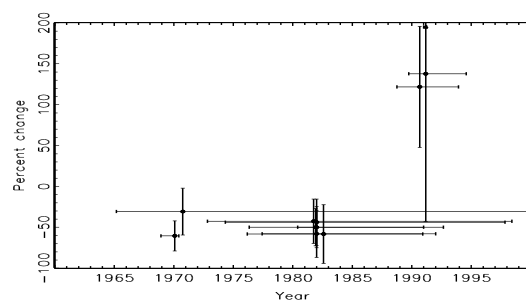
(d) Exchange rates



(e) Producer prices



(f) Consumer prices



(g) Miscellaneous

Figure 33: Scatter plots of volatility break dates against percent change in unconditional standard deviation during recessions for series for which the SupW statistic for a structural change in the unconditional volatility in expansions only is significant at the 5% level, when assuming a nonlinear unconditional mean with structural change during expansions. 90% confidence intervals for the break date and the percent change in standard deviation are included. Series for which the standard deviation more than triples are shown as triangles.