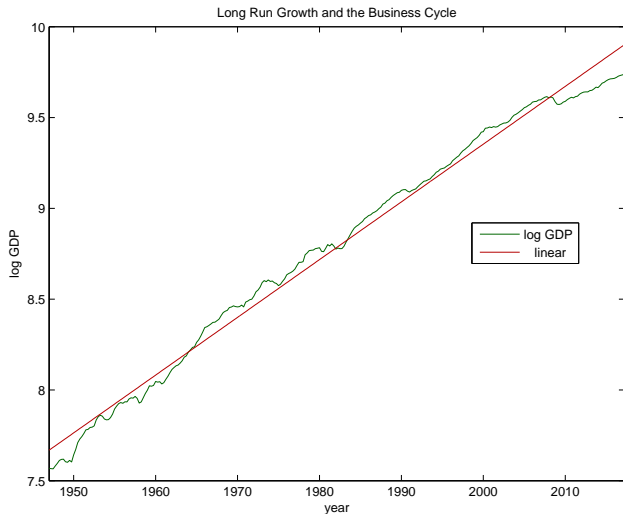# Introduction
Eco 603 Monetary Policy

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August 22, 2017

US GDP: Growth vs. Cycle, constant growth
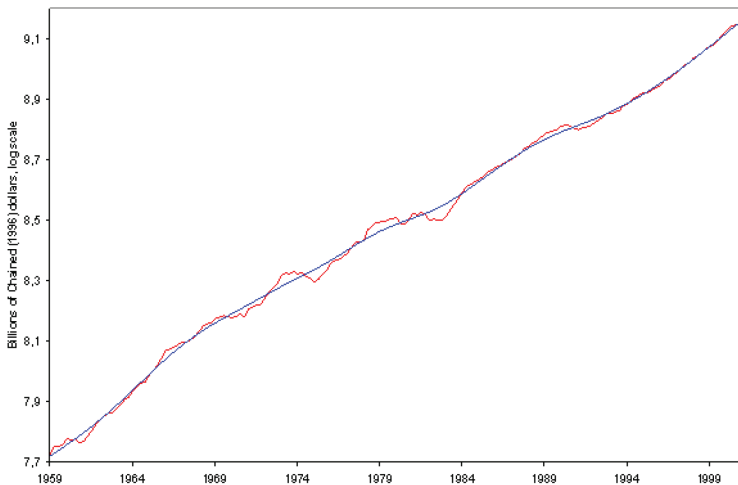
US GDP: Growth vs. Cycle, non-constant growth

Figure 2: Actual and Trend of U.S. Real Gross Domestic Product

Correlations between inputs and the cycle

Variable x	% Std. Dev.	x(t-5)	x(t-4)	x(t-3)	x(t-2)	x(t-1)	x(t)	x(t+1)	x(t+2)	x(t+3)	x(t+4)	x(t+5)
						Cross Correlation of Real GDP with						
Real Gross Domestic Product	1.60	0.01	0.22	0.43	0.67	0.86	1.00	0.86	0.67	0.43	0.22	0.01
Labor Input												
Hours[*][†]	1.71	-0.20	-0.02	0.20	0.45	0.70	0.88	0.91	0.84	0.70	0.51	0.30
Employment	1.45	-0.23	-0.08	0.12	0.36	0.61	0.82	0.90	0.87	0.78	0.62	0.42
Hours per Worker[*]	0.40	0.05	0.20	0.37	0.55	0.68	0.73	0.55	0.30	0.08	-0.15	-0.31
GDP/Hours[*]	0.82	0.46	0.50	0.48	0.38	0.23	0.09	-0.23	-0.44	-0.58	-0.59	-0.56
Avarage Hourly Real Comp[††].	0.84	0.27	0.32	0.32	0.30	0.28	0.23	0.14	0.07	-0.01	-0.10	-0.16
Capital Input[**]	0.38	-0.52	-0.47	-0.38	-0.26	-0.09	0.11	0.32	0.51	0.64	0.72	0.73
Inventory Stock	1.36	-0.30	-0.28	-0.22	-0.12	0.04	0.24	0.51	0.70	0.80	0.80	0.73

[*] Based on quarterly data, 1964-2000.
[†] Establishement Survey.
[††] Nonfarm business sector.
[**] Residential and nonresidential structures, and producers' durable equipment and software.
Source of basic data: DRI Economics database.

Table 1: Cyclical Behavior of U.S. Production Inputs
Deviations from Trends of Input Variables; Quarterly, 1959-2000

# Correlations between income and spending variables and the cycle

Variable x	% Std. Dev.	Cross Correlation of Real GDP with										
		x(t-5)	x(t-4)	x(t-3)	x(t-2)	x(t-1)	x(t)	x(t+1)	x(t+2)	x(t+3)	x(t+4)	x(t+5)
Real Gross Domestic Product	1.60	0.01	0.22	0.43	0.67	0.86	1.00	0.86	0.67	0.43	0.22	0.01
Consumption Expenditures	1.30	0.26	0.44	0.61	0.76	0.86	0.87	0.71	0.52	0.30	0.08	-0.10
Nondurables & Services	0.97	0.15	0.33	0.46	0.59	0.67	0.68	0.60	0.48	0.35	0.22	0.11
Nondurables	1.17	0.16	0.33	0.49	0.65	0.76	0.79	0.68	0.51	0.30	0.09	-0.07
Services	1.23	0.09	0.21	0.28	0.34	0.38	0.38	0.34	0.30	0.26	0.23	0.19
Durables	4.72	0.30	0.46	0.58	0.71	0.79	0.80	0.61	0.41	0.19	-0.01	-0.19
Investment Expenditures	6.86	0.09	0.24	0.42	0.62	0.78	0.91	0.76	0.56	0.32	0.09	-0.16
Fixed Investment	4.82	0.14	0.31	0.48	0.67	0.83	0.88	0.79	0.62	0.41	0.18	-0.05
Nonresidential	4.32	-0.27	-0.12	0.07	0.31	0.55	0.77	0.85	0.83	0.72	0.55	0.34
Structures	4.74	-0.39	-0.29	-0.17	0.02	0.23	0.46	0.60	0.65	0.64	0.57	0.42
Equipment	5.22	-0.14	0.03	0.23	0.47	0.69	0.85	0.86	0.78	0.64	0.43	0.20
Residential	10.20	0.48	0.59	0.67	0.74	0.74	0.62	0.40	0.16	-0.06	-0.25	-0.40
Government Purchases	1.82	-0.07	-0.04	-0.01	0.03	0.08	0.15	0.18	0.20	0.24	0.32	0.36
Federal	2.83	-0.09	-0.07	-0.05	-0.04	-0.01	0.04	0.07	0.09	0.13	0.19	0.23
State & Local	1.38	0.03	0.06	0.09	0.15	0.20	0.25	0.27	0.30	0.33	0.39	0.44
Exports	4.25	-0.43	-0.38	-0.29	-0.14	0.08	0.28	0.40	0.44	0.44	0.45	0.42
Imports	4.76	0.21	0.30	0.41	0.53	0.68	0.74	0.68	0.48	0.28	0.09	-0.13
Real Net National Income[*]												
Labor Income	1.56	-0.08	0.11	0.31	0.55	0.76	0.92	0.87	0.75	0.57	0.38	0.18
Capital Income	2.40	0.15	0.33	0.50	0.65	0.77	0.82	0.60	0.38	0.17	-0.01	-0.15

[*]Proprietors' income is devided between labor and capital income according to the procedure described in Ch. 1 of Cooley T. F., Frontiers of Business Cycle Research, Princeton University Press, 1995.

Source of basic data: DRI Economics database

Table 2: Cyclical Behavior of U.S. Output and Income Components
Deviations from Trends of Product and Income Variables; Quarterly, 1959-2000

Cycle component of Consumption and GDP

Figure 4: Consumption of Nondurable Goods and Services
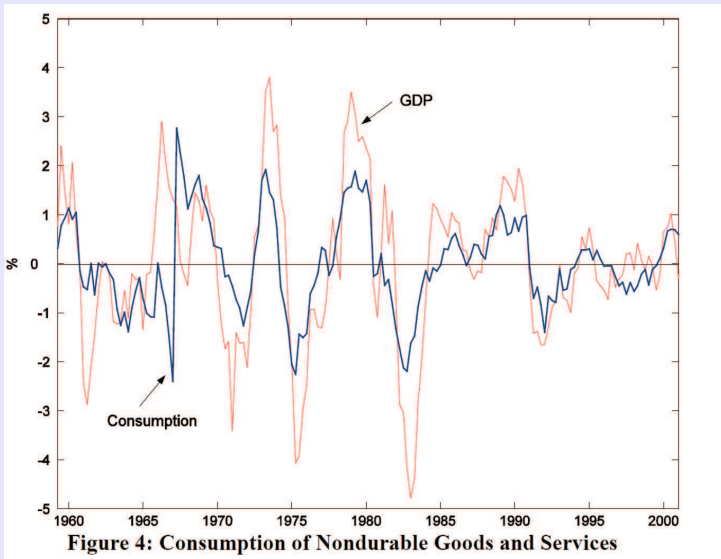
Cycle component of investment spending and GDP
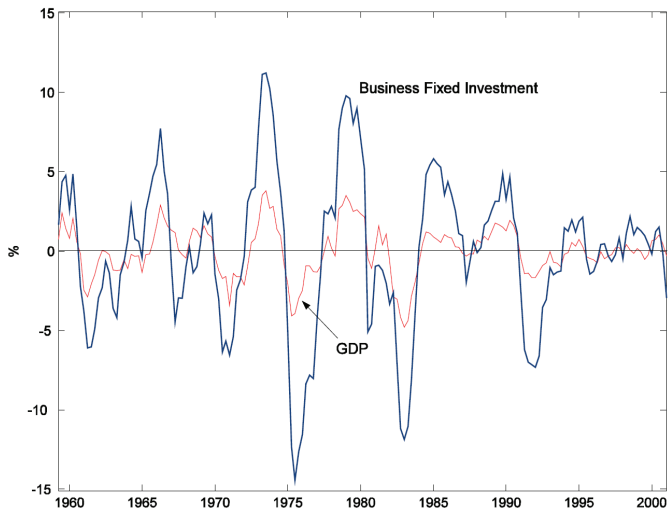
Figure 6: Business Fixed Investment

Cycle component of consumer durables and GDP

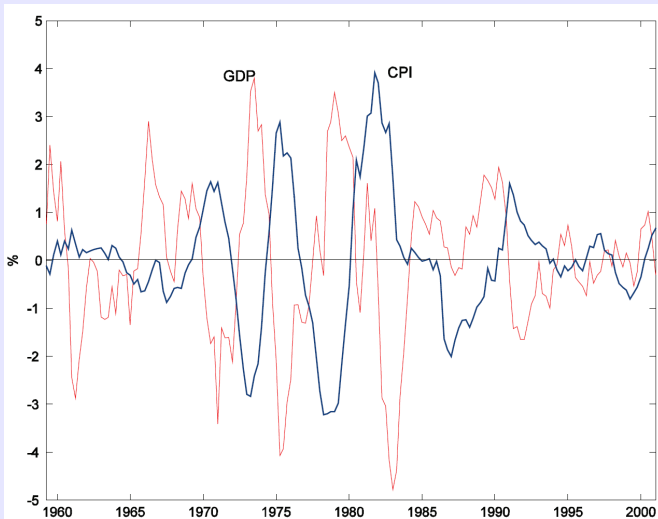**Figure 5: Consumer Durables Investment**
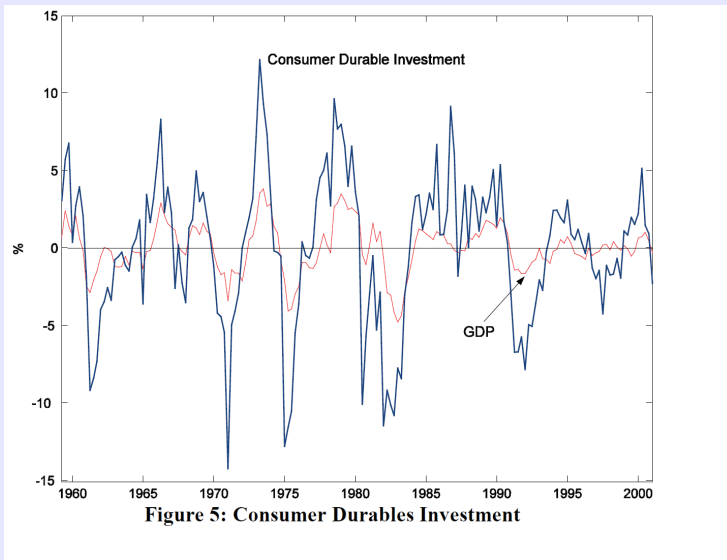
Cycle component of CPI and GDP

Figure 7: Price Level (Consumer Price Index)