

11. Macroeconomic and Industry Analysis ¹

- Top-down Equity Analysis
 - Analyze macro-economy
 - Choose industries likely to benefit
 - Choose niche in industry.
 - Choose a company

- Macroeconomics - Affects asset allocation (countries, sectors, market timing). E.g, Durables (autos) decline rapidly with slowing economy
 - Global Economics and Risk
 - Key Macroeconomic Variables
 - Demand and Supply Shocks
 - Sector rotation strategies

- Industry Analysis – Affects relative pricing and profit potential. E.g., tech not now favored.
 - Exposure to Business Cycle
 - Industry Life Cycle
 - Industry Competition and Valuation

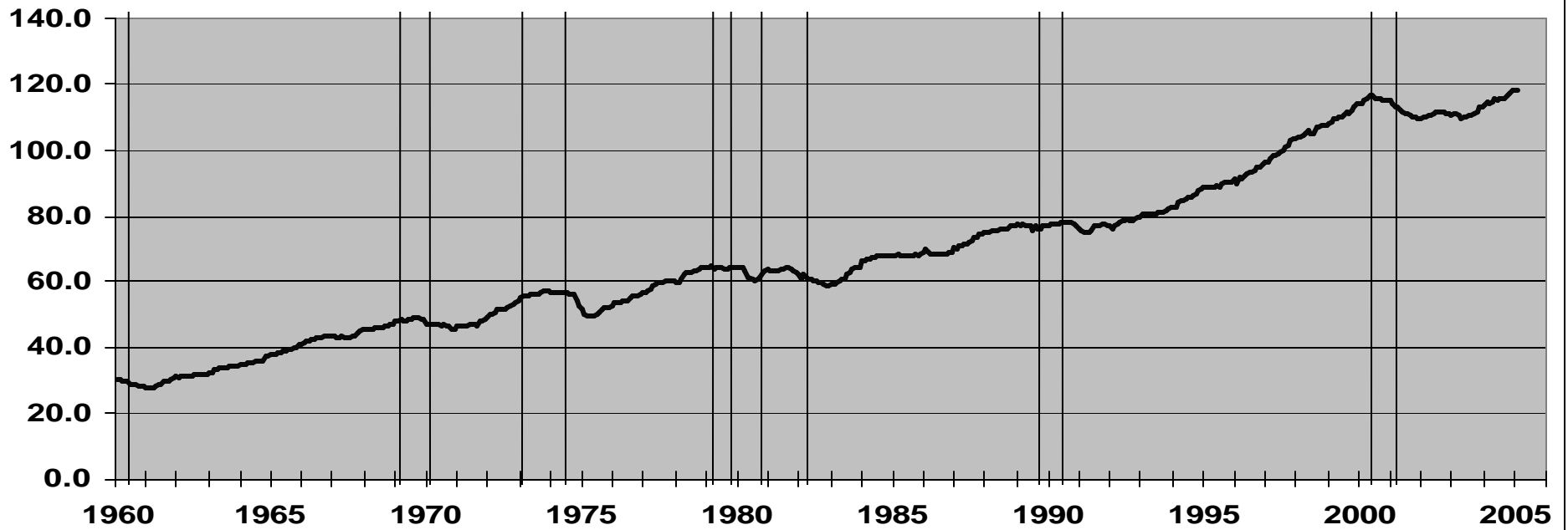
Macro: Global Economics and Risk

- Country and regional performance is highly variable
- Political Risk – business in Iran in late 1970's had assets confiscated!
 - Ideology (inalienable rights); Gov't structure; Transition of power
- Institutional Risk – business in Russia in late 1990's....
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- Physical – geographic and demographic. E.g., Japan vs US
 - Pop 2000: 121.5M vs 285.6M US;
 - Area: 372,000 sq. km. vs 9,363,000 US;
 - Natural resources – Import oil 99.8%; iron ore 98.6%; Al 100%; wheat 93%.
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- Exchange rate risk - Intermediate goods; sales; profits;
 - Capital Flows: $C + I + G + X - M = C + S + T - R$
 $0 = (S - I) + (M - X) + (T - G - R)$
 $0 = \text{Domestic Saving} + \text{Foreign Saving} + \text{Gov't Saving}$
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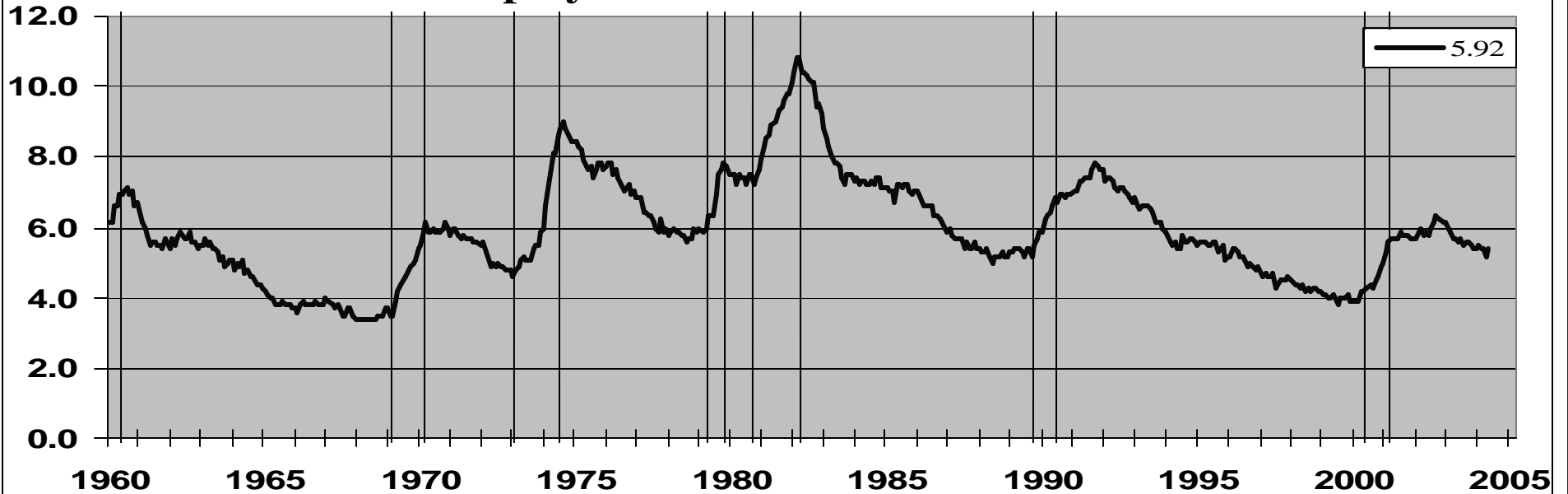
Macro: Key Macro Variables

- Output
 - GDP (2-3.5% growth) - Value of goods and services produced.
 - Unemployment rates (4-6%) - Percentage of labor force that are unemployed
 - Labor force –
 - Consumer sentiment –
- Interest rates (3-10%) & inflation (1-4%)
 - Long vs short-term; Default risk
- Cyclical Indicators –
 - Leading - Hrs worked, consumer expect, stocks, unemp claims, M2, yld curve.
 - Coincident - IP, Personal inc, manufacturing sales, Non-Ag employees.
 - Lagging - Unemp duration, inv/sales, cons credit, prime rate, services CPI.
- Sector Rotation –
 - Contraction –
 - Bottom (before expansion) –
 - Expansion – Cyclical (smokestack); Interm gds (metals, plastics); durables,

Industrial Production with NBER Recessions



Unemployment with NBER Recessions



Macro: Demand and Supply Shocks

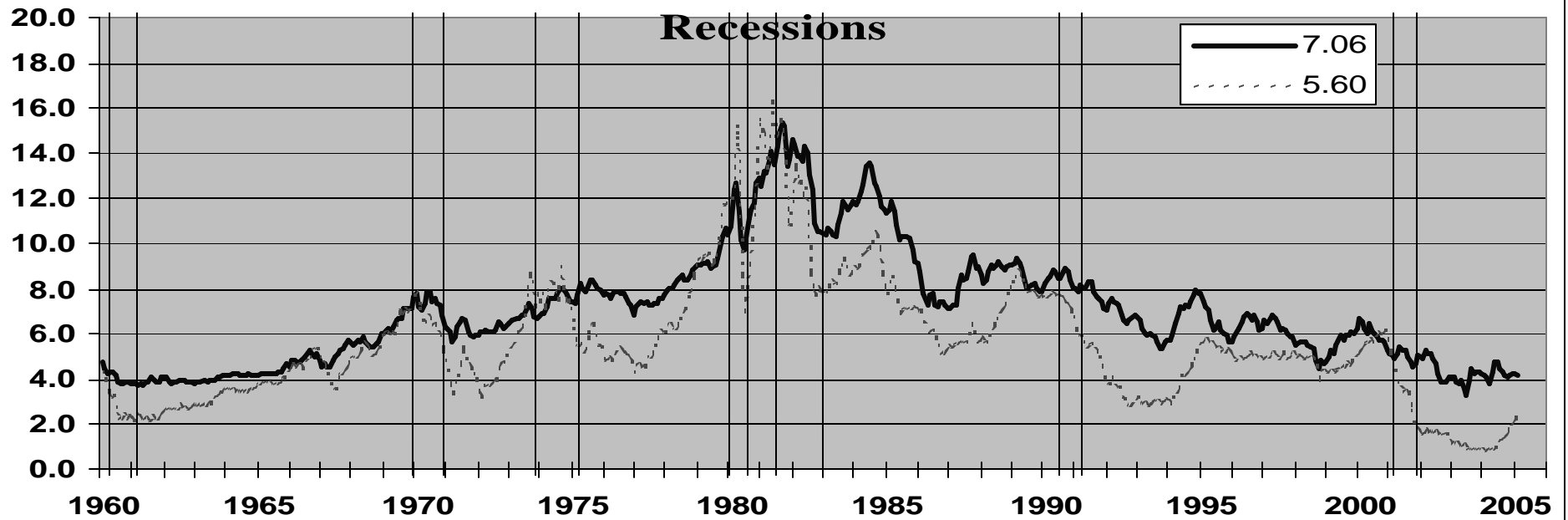
- Demand shock – event that affects demand for goods & services
 - $Q = C + I + G + (X-M) = 68\% + 17\% + 32\% + -17\%$
 - Greater wealth, e.g., via stock market (1998-2000)
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- Supply shock - event that influences production capacity or costs
 - Commodity price changes (oil shocks in 1973-74)
 - Fiscal “supply side” policies to increase LR growth –

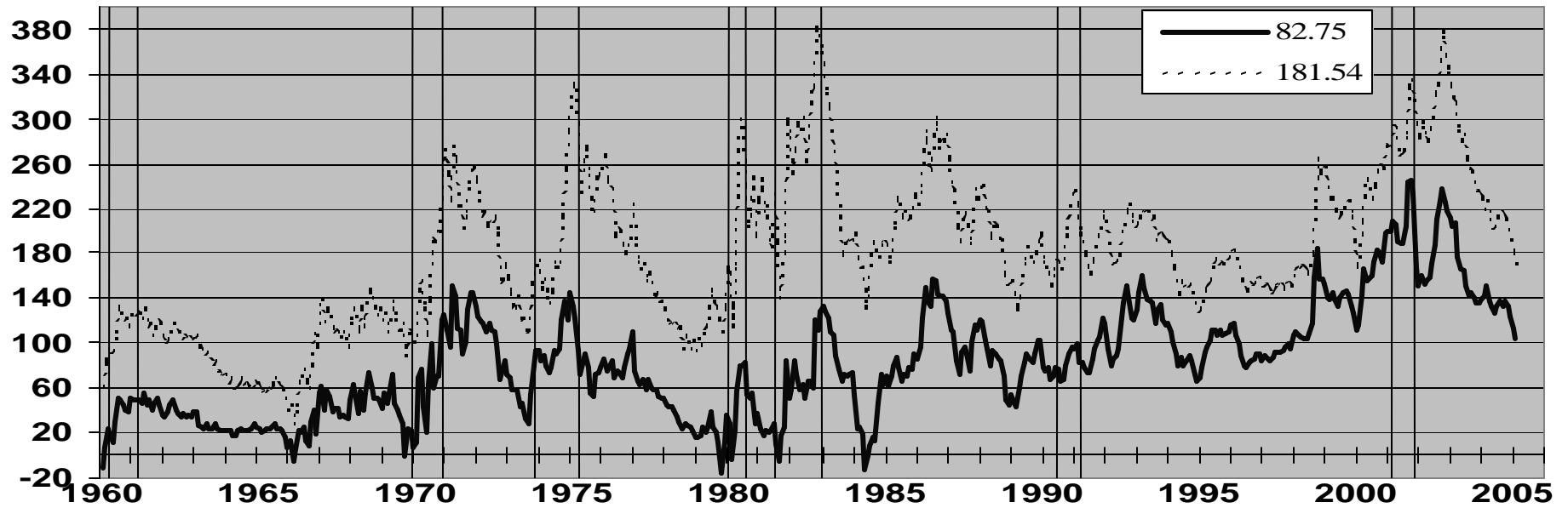
- Fiscal Policy – discretionary govt spending and taxation, usually to affect AD.
 - Very long lag for implementation; additional for effectiveness.
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- Monetary Policy – actions on short-term interest rates by Fed Reserve.
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Treasury Yields: 10-yr (solid) and 3-mo with NBER

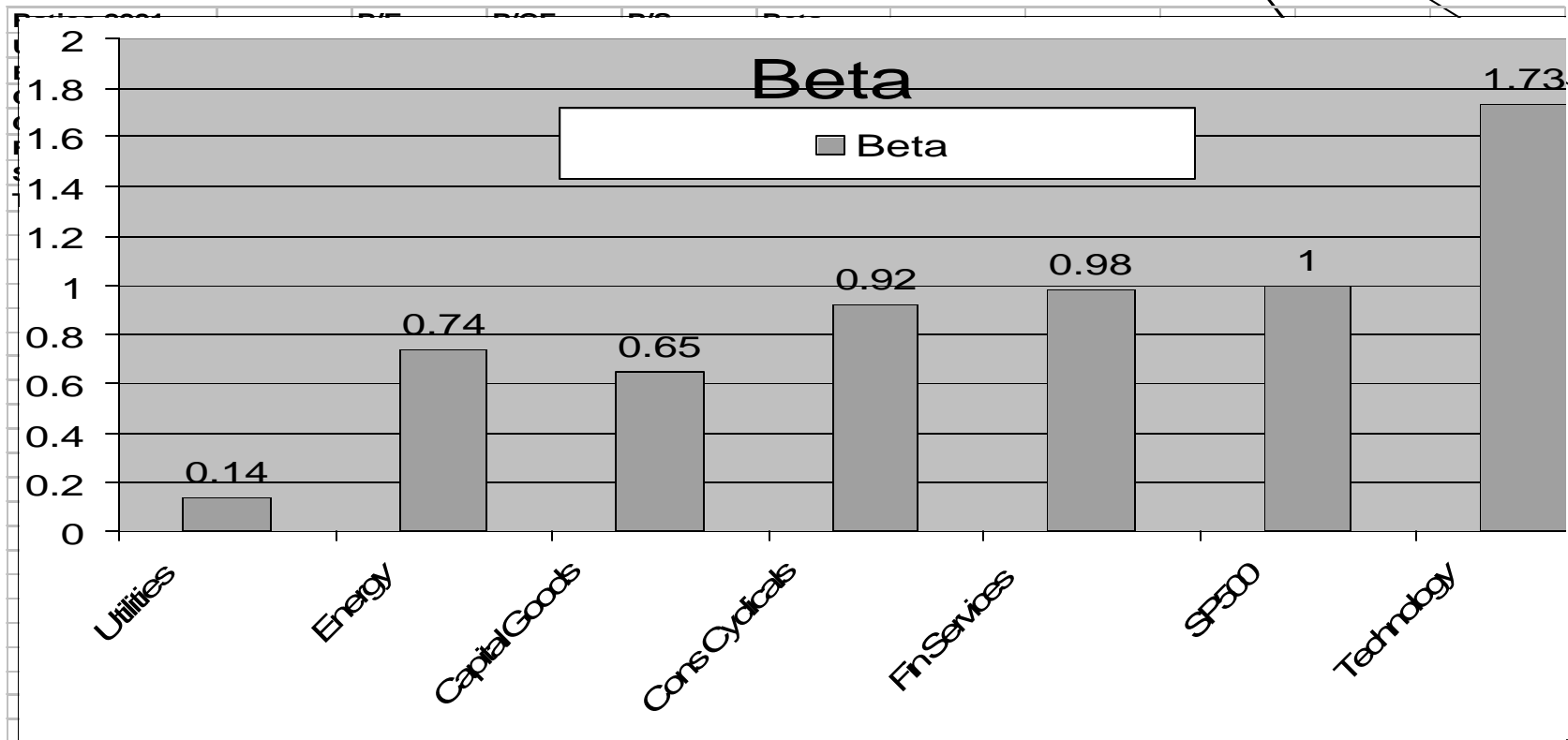


Credit Spreads (Aaa and Baa vs 10-yr Treas)



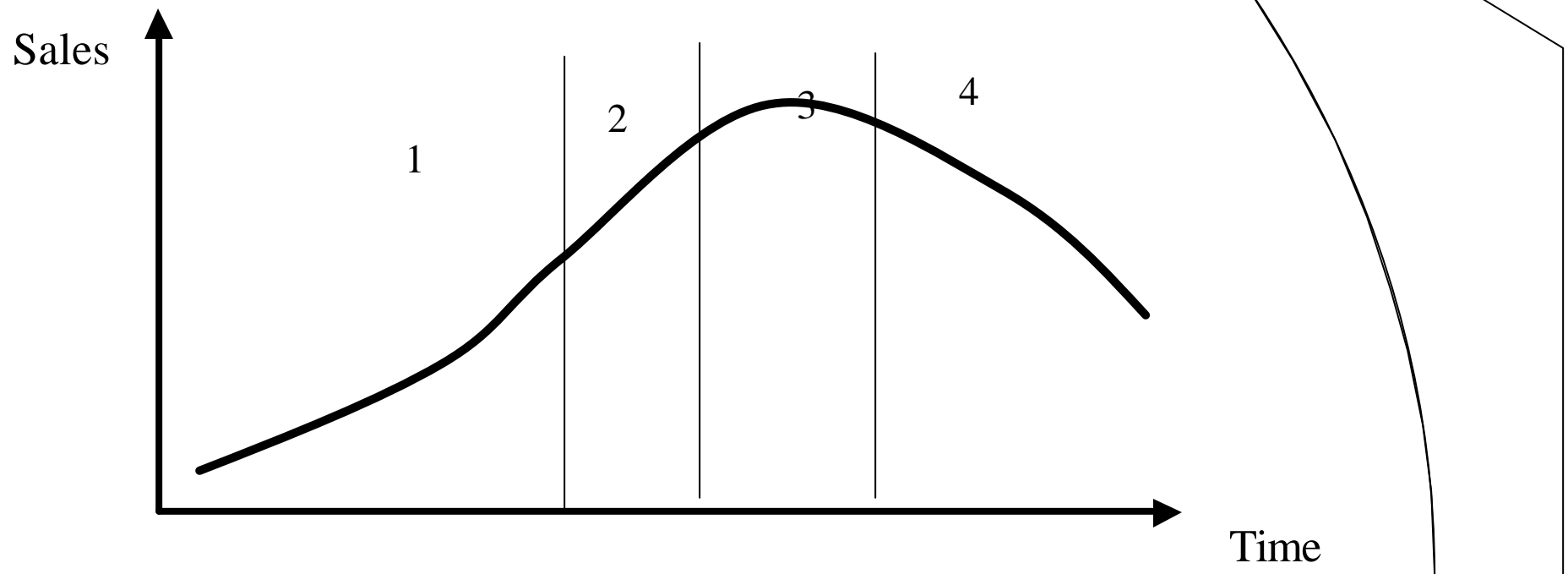
Industry and Business Cycles

- Sensitivity of profits to business cycle determined by
 - Sensitivity of firm’s sales to business cycle
 - Cyclical -
 - Non-cyclical -
 - Operating leverage -
 - $DOL = \% \text{ change in profits} / \% \text{ change in sales}$
 - Financial leverage –



Industry and Life Cycles

- Industry life cycles – affects relative valuation (e.g, PCs)
 1. Start-up -
 2. Consolidation -
 3. Maturity -
 4. Relative decline -



Industry Structure and Competition

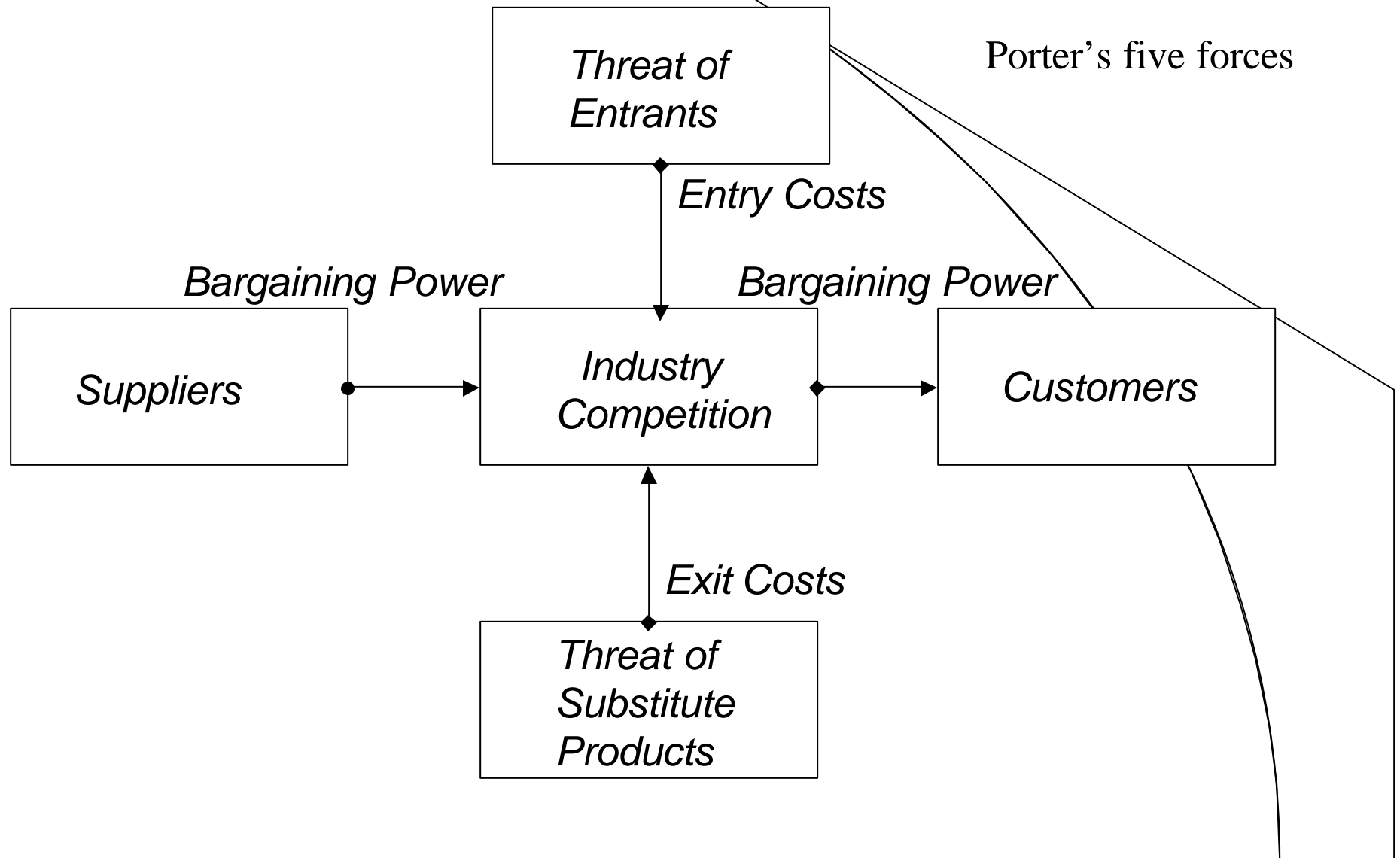
- Perfect Comp – many sellers with unrestricted entry and exit. Low profits.
 - Compete only on price (no product differentiation)
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- Monopoly - Single seller with restricted entry. High profit potential.
 - Entry restricted by advertising, fixed costs, networks... "Local" monopolies.
 - GM (1956-71) - 75% of locomotives;
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- Monopolistic Comp – many sellers with unrestricted entry and exit. Some profit.
 - Compete on price *and* non-price factors – partially differentiated products
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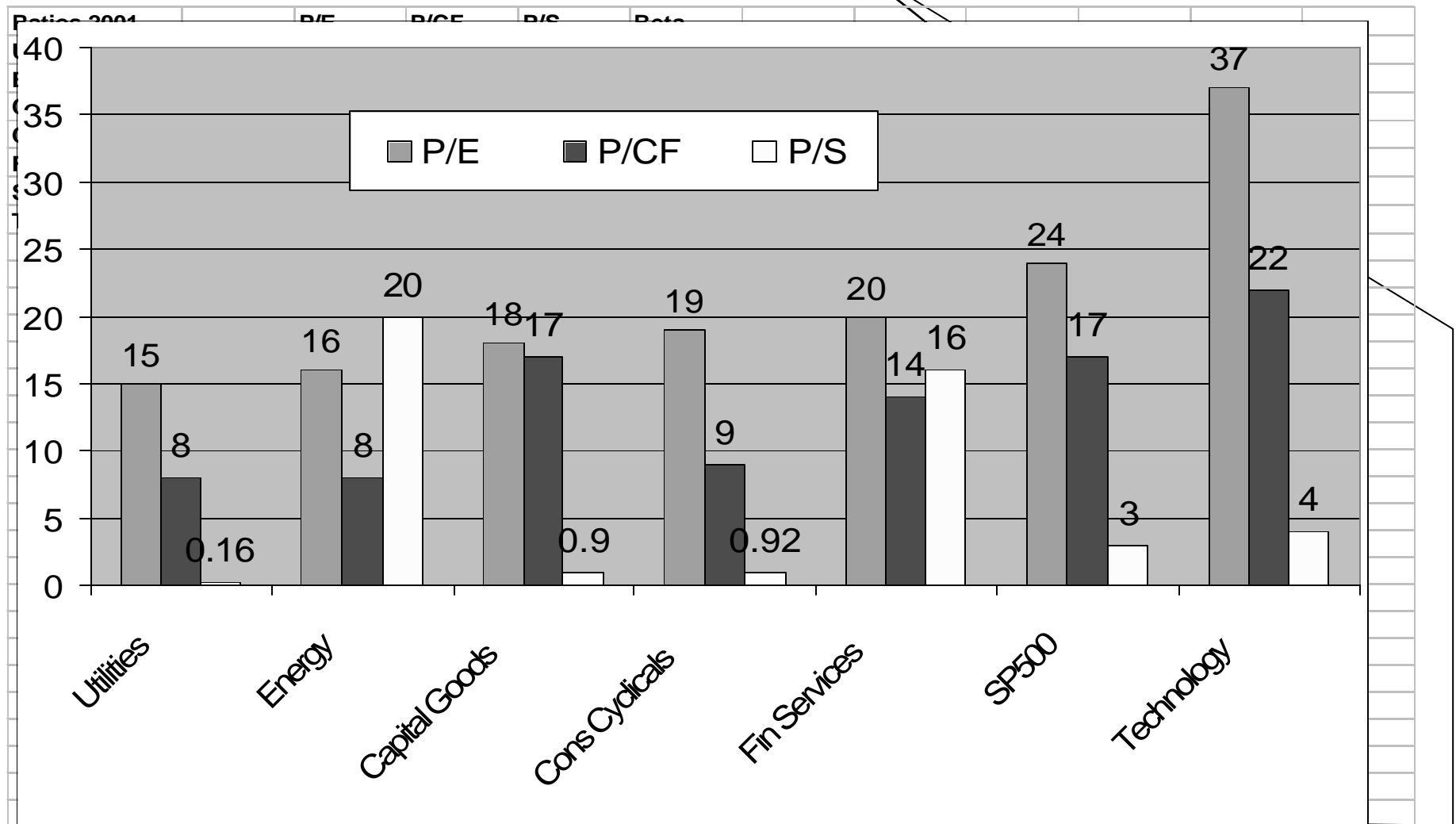
- Oligopoly – few sellers that are large relative to market. Low or high profits.
 - Mutual interdependence on price. Some barriers to entry.
 - Pure (no differentiation) – steel, aluminum, cement, fuel oil, airlines.
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Industry Relationships and Competition



Industry Valuation Ratios (2003)

- See “Map of the Market” and <http://www.smartmoney.com>



Summary: Macro and Industry Analysis

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