Lecture II

ECONOMIC TRENDS

Outline of Lecture by

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Economic Forecasting - More an art than a science and we have no great artists!

Introduction

- A. Function: To promote thought and provide basis for discussion rather than make precise prediction for 1956 7 although I shall do that incidentally
- B. Why I am a central banker
 - 1. Inherently an observer and analyst
 - 2. Less need to predict than others
 - 3. Conviction I owe society something for being part of it
- I. The inevitability of forecasting To live is to forecast
 - A. Implicit in every action taken
 - 1. Crossing the street
 - 2. Stocking up on inventory
 - a. To avoid shortage
 - b. To beat a price rise
 - 3. Building a plant
 - B. Advantages of explicit, systematic forecasting, particularly knowing our assumptions

301 > Luleminay 6.N.P. 4383 Estemples CON SUMER new onces 282.2 neft week Durables 35/ Nondukables 140.9 SCEVICES 106.2 Private 65.4 Cox struction 33. 2 Prolucers Goods 30.5 Inventories 1.7 3.0 Foreign 87.8 60rT Fed 57.5

31.3

Make segarate card

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II. Aspects of economic forecasting

- A. Even the strongest demand for an accurate forecast does not mean that it will or can be supplied
- B. Forecasting in the physical sciences and in human affairs
 - 1. In the physical sciences, the results often are independent of the forecaster
 - 2. In human affairs, they may not be
 - a. Hypothetical illustration:
 Suppose a forecaster had a perfect record but nobody believed him

(Walter Winchell broadcast)

Then everybody discovers his wizardry and bases their action on his forecast
He predicts "General Motors common will go up 3 points next Wednesday."

III. Requirements for economic forecasting

- A. An understanding of how the particular economic system works e.g. U.S.S.R. vs. U.S.A.
 - We have a money and credit economy operating through markets
 Each \$1 spent is a vote or directive to use \$1 of our resources for that purpose
 Not wholly free and Government spends too!
 A profit and loss economy
- B. A framework

A systematic, internally consistent, whole into which all the parts fit - with none left out and none counted more than once. The theory of G.N.P.

This doesn't solve anything. It is a method not a result - for the future.

- C. A judgment as to public policy
 - 1. Fiscal policy
 - 2. Debt management policy
 - 3. Monetary policy
- D. A method of relating
 your theory A
 your framework B
 public policy C
 to the current situation

1. The method of past relationships

- a. In general, the method of the physical sciences
- b. Its usefulness
- c. Illustrations of its inadequacy
 - (1) Soap D. C. Melnicoff example

Excerpt from speech by David C. Melnicoff, Business Analyst, The Penna. Railroad Co., before National Conference of the American Marketing Association, Pittsburgh, Pa. 6/20/56

"A projection of the market for soap made in 1939 on the then reasonable assumption that it would grow in accordance with its past relationship to population and income, would show a market expansion for 1946 that was close to the actual increase. By 1953, however, this projection would have been well over double the actual market. Here a change in technology made the difference."

(2) Population forecasts

(a) N. S. Pritchett - Washington University mathematician and astronomer

Method - 3° parabola to census data 1790-1890 - excellent fit

Forecast - by 2900 U.S. population would = 41 billion

Three errors

- (i) Population growth can be expressed in mathematical formula
- (ii) Population function of time only
- (iii) That shape of formula revealed by experience 1790-1890
- (b) Population projections of 1930's & 1940's
 Woytinsky's judgment: "Their projections
 deserve a place of honor in the history of
 statistical methodology as specimens of
 unsurpassed skill and patience. Their
 only weak point is that they proved to be
 false."

Census actual: 1920 105.7 1930 122.8 + 17⁺ 1940 131.7 + 9⁻ 1950 150.7 + 19

(b) (continued)

	Highest estimates for 1952			
	1937 projection 146.8 (act.approx.129) 1943 " 147.3 1947 " 149.3			
	Actual July 1, 1952 Bureau of Census 157.0			
(28 years proj. reached in 6 yrs.)	1947 projection gave "probable" of 160.6 in 1975 - reached in September 1953			
	Extrapolated decline in natality in 1930's is permanent			
	Didn't anticipate the courage-foolhardiness of the G.I.			
(c)	Population projections for 1960 (World Population - Woytinsky, p. 252)			
	Low High			
	rces Committee 137.6 155.3 rces Planning Board 147.7 156.5			

1944 Bureau of 1950 Bureau of					158.6 179.8
Diff. 1937 1950	H - L =]	17.7) 18.6)	but	both H + L are	+24 over 1937

Actual - p. 44	1900	76.0
	1910	92.0
	1920	105.9
	1930	122.9
	1940	131.4
	1950	151.7

The Harvard Economic Service - Bullock-Persons started with 50 series to get consistency of cycle behavior

The A, B and C curves

- A Speculation preceded B by 4-10 months New York bank clearings Shares traded Industrial stock prices
- B Business preceded C by 2-8 months Outside N.Y. bank clearings Bradstreet's index commodity prices
- C Banking Rate on 4-6 month paper Rate on 60-90 day paper

- 2. The method of current behavior
 - a. That it will continue unchanged
 - b. That recent trend will continue
 - c. But the only "constant" in life is change
 will always be after the event
- The method of securing expressions of current opinion
 of informed observers
 e.g. builders, car dealers, purchasing agents
- 4. The method of expressions of current intentions e.g. capital expenditures surveys, survey of consumer finances
- E. Assumptions implicit or explicit

No rabbits in the hat

You cannot get more out of your projection than the assumptions you put into it

- 1. As a whole
- 2. In detail
- F. The element of "judgment"

IV. The national product accounts

- A. A quick look at the breakdown
 - 1. G.N.P.
 - 2. Personal consumption expenditures
 - a. Non-durables
 - b. Services
 - c. Durables
 - 3. Gross private domestic investment
 - a. Construction
 - (1) Housing
 - (2) Other
 - b. Equipment
 - c. Inventories
 - 4. Net foreign investment
 - Government expenditures for G. + S.
 (exclude transfer payments, O.A.S.I., interest, etc.)
 - a. Federal
 - (1) Defense
 - (2) Other
 - b. State and local

B. What has happened recently?

- 1. The Korean build-up
 - a. From QII 1950 to QII 1953
 - b. Major changes

(1)	G.N.P. from	275	to	<i>3</i> 70		+95	35%
(2)	Gov't	40	to	85		+45	
•	(a) Federal	21	to	61	+40		200%
	(b) Local	19	to	24	+ 5		25%
(3)	Consumption	189	to	231		+42	
	(a) Non-dur.	100	to	120	+20		20%
	(b) Services	62	to	81	+19		30%
	(c) Durables	27	to	31	+ 4		15%
(4)	Private invest-	•					
	ment	48	to	55		+ 7	15%

- 2. The breathing spell
 - a. From QII 1953 to QII 1954
 - b. Major changes 355 1
 - (1) G.N.P. from 370 to 358 -12 (2) Gov't 85 to 76 - 9 (a) Federal 61 to 49 (b) State 24 to 27 + 3 (3) Consumption 231 to 235 (4) Private invest. 55 to 47
 - c. Why the big hullabaloo over a 3% drop?
 Political

Fear of cumulative

- (1) Essentially, because we made a concurrent shift in what we bought
 - (a) Consumers shifted <u>from durables</u> -2 to services and non-durables
 - (b) Business cut down on equipment -2 on inventories
 4.5 to -2.7 -7
 - (c) Government cut down on hard goods except planes
- (2) This hit the output of <u>DURABLES AND MINES</u> and <u>Baployment</u>

3. The past two years

- a. From QII 1954 to QII 1956
- b. Major changes
 - (1) G.N.P. from 358 to 408 +50 145
 - 76 to 79 (2) Gov't + 3
 - (a) Federal (b) State & local
 - 235 to 264 (3) Consumption +29
 - (a) Durables 29 to 33 + 4
 - (b) Non-dur. 120 to 133 +13
 - (c) Services 86 to 98 +12
 - +18 47 to 65 (4) Investment
 - (a) Construe. 27 to 33 + 6 (b) Equipment 22 to 27 + 5
 - (c) Inventories 3 to + 4 + 7
 - (5) Net foreign (no change)

V. Where do we go from here?

- A. Assumption on public policy will in general be directed to stable growth
- B. Recent past shows amazing flexibility
 - 1. Increase in efficiency to meet rising wage rates
 - Illustrations:
 - a. Reduction in residential construction of \$2 billion from QIII 1955 to QII 1956 more than offset by rise in commercial construction of \$1 billion and in durable equipment \$2.5 billion and Inventories \$1 billion, so total investment rose.
 - b. Decline in auto sales and other durables of \$4 billion offset by increase in non-durables
- C. Arrange accounts in order in which we know something about their probable behavior

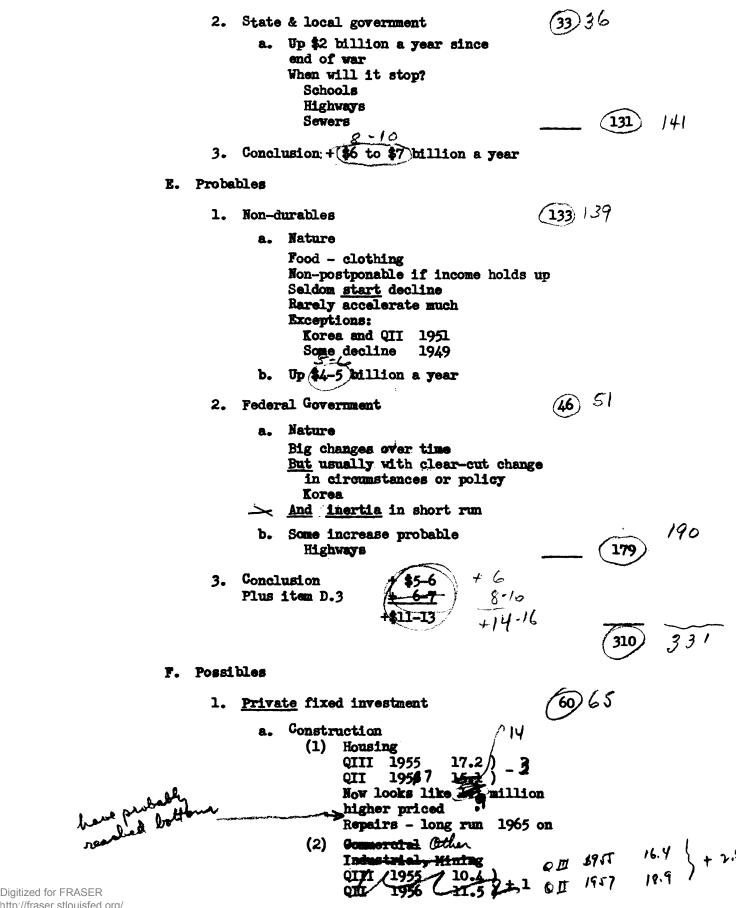
Common sense: The ideally distributed economic good! Look at charts (Board pp. 46-47) 430 Remember the general total

- D. Highly probables
 - 1. Personal services

a. Nature of item Rents and imputed rents tend to make more stable utilities Financial services

b. Up \$4\frac{1}{2}-5 billion a year regularly since end of war

98 105



http://fraser.stlouisfed.org/ Federal Reserve Bank of St. Louis Durable equipment

QII

QIII 1955

25.0)

c. Conclusion - not much change - some cautions d. Have now covered 670 - probably up, say, 12

G. The Great Unknowns Consumer durables Nature Can accelerate or postpone e.g. Korea 1950 OI 26.5 QII 34.0 QIII 30.0 e.g. 1955-56 QI 1955 34.7 QIII 37.2 QII 1956 33.4 b. The automobile - white goods - household e. The steel perike d. Conclusion Some decline in 3rd quarter followed by pick-up - rather rapid 2. Inventories Nature Role in the business cycle Inadequacies of the data Voluntary vs. forced Turn around in a year 8/7 Fillin QIV 1949 (-6) to QIV 1950 (+11) #8 billion -4 to +5 QIII 1954 to QII 1955 37 Conclusion Some decline in 3rd quarter followed by rapid pick-up in 4th Now +4 to say -3 = net-of -7 then to +1 or 2 H. General conclusions per yr. 1. Highly probables 131 +6 to 7 190 2. Probables 179 +5 to 6 Possibles 60 Great unknowns Digitized for FRASER 407 http://fraser.stlouisfed.org/ Federal Reserve Bank of St. Louis

VI. Some gratuitous comments

- A. Willingness to stick out neck to provoke thought
- B. Economic possibilities of our grandchildren