



Fred C. Armstrong

THE BUSINESS OF ECONOMICS

The Business of Economics

Fred C. Armstrong

University of Tennessee at Chattanooga

West Publishing Company

St. Paul ▪ New York ▪ Los Angeles ▪ San Francisco

Copyediting: Katherine Teel
Composition: Metro Graphic Arts, Inc.
Cover design: Alice B. Thiede

COPYRIGHT © 1986 By WEST PUBLISHING COMPANY
50 West Kellogg Boulevard
P.O. Box 64526
St. Paul, MN 55164-1003

All rights reserved

Printed in the United States of America

Library of Congress Cataloging in Publication Data
Armstrong, Fred C.
The business of economics.

Includes index.

1. Finance—United States. 2. Finance, Public—United States. 3. Finance. I. Title.
HG181.A696 1985 336.73 85-13799
ISBN 0-314-85316-2

1st Reprint—1986

Preface

This book describes some thirty procedures that link theories taught in economics and business courses to their real-world applications. For example, the section on how the federal government forms a budget describes a procedural link between fiscal theory and practice.

My experience is that students' interest in the economy is highest when abstraction is lowest, so it can be helpful to relate areas of study to current events. Within the constraint of supplementing the standard text, the procedural choices made here were based on that premise; and each description is nonanalytical and self-contained for that reason. It would be a rare week in which one or more of the procedures described here would not be part of a newsworthy business or economic event. Even a procedure as ordinary as check clearance was made a news item in 1985 by an aggressive brokerage house. Each month, the unemployment rate is news; each Monday the Treasury bill rate is news; each Thursday, the money supply is news, and so on.

As they appear here, the order of the procedures roughly parallels the arrangement of textbooks. Part One discusses procedures for measuring the economy. Part Two deals with money processes. Part Three examines fiscal policy and taxation and is part macro and part micro, as is Part Four on international trade. Part Five is on procedures used in the micro institutions of our economy—how corporations and unions are formed, for example.

I have also prepared a test bank that contains over 400 multiple-choice and true/false questions.

I wish to thank these reviewers, whose comments helped to shape the final manuscript:

Forest Denman
Mercer University

Ralph Fowler
Diablo Valley College

Vernon Savage
Southwest Texas State University

Gerald Toland
South Dakota State University

William Trumbull
West Virginia University

William Zeis
Bucks County Community College

My hope for this material is that it will help students unravel the mysteries of our economy.

Contents

Tables and Figures vii

Preface ix

Part One: Government Figures

1. How Government Figures Are Prepared 2
2. How the Government Measures Unemployment 4
3. How the Government Assembles the Gross National
Product Figures 12
4. How the Consumer Price Index Is Determined 19

Part Two: Money and Banking

5. The Money Process 28
6. How the Money Supply Is Determined 32
7. How Currency and Coins Are Issued 37
8. How Checks Clear 43
9. How Bank Reserves Are Determined 50
10. How Banks Participate in the Federal Funds Market 58
11. How Banks Borrow From the Federal Reserve 61
12. How to Invest in the Federal Debt 64
13. How the Federal Reserve Conducts Open
Market Operations 72

Part Three: Fiscal Policy and Taxation

14. How the Fiscal Budget Is Determined 78
15. How the Federal Government Forms a Budget 82
16. How Tax Laws Are Enacted 86
17. How the Property Tax Is Collected 89

- 18. How the General Sales Tax Is Collected 93
- 19. How the Personal Income Tax Is Collected 96

Part Four: International Finance

- 20. How the International Balance of Payments Is Determined 102
- 21. The Export Process 111
- 22. The Import Process 118
- 23. How Exchange Rates Are Determined 124

Part Five: Microeconomic Institutions

- 24. How a Corporation Is Formed 132
- 25. How to Read Financial Statements 137
- 26. How to Read the Stock Market Reports 144
- 27. How a Brokerage House Operates 149
- 28. How Workers Get the Protection of the Wage and Hour Laws 156
- 29. How a Union Is Formed 160
- 30. How Farmers Get Price Supports 167
- 31. How a Utility Gets a Rate Increase 172

- Index 177

Tables and Figures

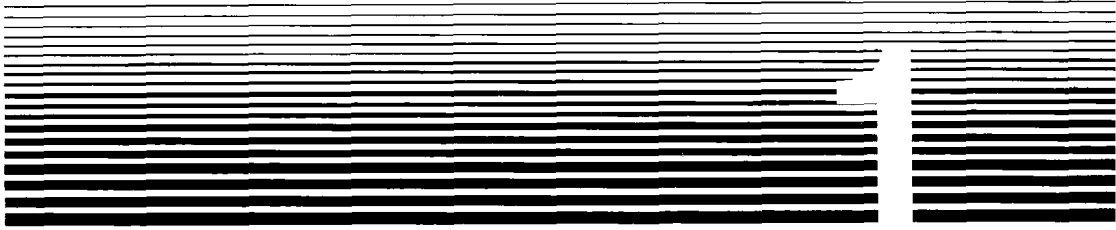
Tables

2.1	Current Population Survey: Household Member Questions	5
2.2	Current Population Survey: Employment Questions	6
2.3	Potential Gross National Product Estimates	9
2.4	Duration of Unemployment, 1983–84	10
2.5	Employment Status of the Labor Force, 1950–84	10
3	Summary National Income Accounts, 1983	13
4.1	CPI Market Basket: Benchmark Years	20
4.2	CPI-W, 1967–1984	23
4.3	CPI-U and CPI-W, by Categories	24
6.1	Money Stock Components, 1981–84	34
6.2	Money Supply Targets, 1981–84	36
7.1	Federal Reserve Notes: Outstanding and Collateral, October 1984	41
7.2	Federal Reserve Liabilities, October 1984	42
8	Check Clearance Time	49
9.1	Reserve Requirement Changes	51
9.2	Schematic of the Contemporaneous Reserve System	56
10	Federal Funds Rates, 1979–84	60
11	Federal Reserve Interest Rates	63
12	Gross Debt of the U. S. Treasury, 1980–84	70
13	Federal Reserve Open Market Transactions, 1984	74
14.1	Federal Unified and Fiscal Budgets, 1980–84	79
14.2	Fiscal Budgets: Federal, State, and Local, 1980–84	80
14.3	Government Sector Fiscal Budgets, 1980–84	80
15	Federal Budget Calendar	83
17	Property Tax Rates	91
18	Sales Tax Format	94
19	Personal Income Tax Format	96

20.1	Balance Sheet Equation for the Balance of International Payments, 1980-84	103
20.2	United States International Transactions, 1980	104
20.3	Net Foreign Investments, 1980	110
22.1	Tariff Schedule, Example 1	120
22.2	Tariff Schedule, Example 2	121
23	Foreign Exchange Rates, August 1984	128
25	Balance Sheet and Income Statement	138
30.1	Grain Price Supports, 1980	168
30.2	Grain Target Prices and Loan Rates, 1981-84	170
31	Utility Rate Increase Request	173

Figures

2	Labor Force Schematic	7
4	CPI Check List Example	21
7	Currency Facsimile	39
8	Check Facsimile	44
9	Bank Deposit Report	54
12	Treasury Bill Tender Form	66
20	Travel Survey Card	108
21.1	Sight and Time Draft Facsimile	113
21.2	Letter of Credit Facsimile	115
21.3	Shipper's Export Declaration	116
22	Consumption Entry Form	122
24	Corporate Charter Facsimile	135
27	Brokerage House Confirmed Statement	151
29.1	Union Authorization Card	162
29.2	NLRB Petition Form	164
29.3	Employee Voting Rights	165



Government Figures

- 1. How Government Figures Are Prepared**
- 2. How the Government Measures Unemployment**
- 3. How the Government Assembles the Gross National Product Figures**
- 4. How the Consumer Price Index Is Determined**



How Government Figures Are Prepared

The five numbers most often used to describe the magnitude of the economy of the United States are the gross national product, the consumer price index, the unemployment rate, the international balance of payments, and the money supply. This section describes how the first three of those numbers are gathered; the derivation of the money supply figures and the international balance of payment figures is described later in the sections on money and international trade.

Although the magnitude numbers for our economy are prepared by and for the federal government, they are also published for public use. The publications containing the figures described in this section are cited in the descriptions and are available in most school and public libraries. In fact, each congressional district has two libraries designated as public depositories, which receive all government publications. Government studies are never copyrighted and may be used without payment.

Government figures are arrived at in three different ways: complete enumeration, sampling of the universe involved, and assembly from other studies. The population census, taken every ten years, is our only example of an attempted complete enumeration. The consumer price index and the unemployment rate are examples of figures arrived at through sampling, and the gross national product figures are arrived at through assembly.

The most frequently asked questions about magnitude numbers are whether they are accurate and whether they are ever tampered with for political or economic advantage.

The answer to both questions is no. The figures are not accurate; they are estimates, but no less useful for that reason. What is important about magnitude numbers is that they be consistent, that the unemployment rate this month mean the same thing it meant last month. On consistency the

magnitude numbers get high marks. However, this does not mean that the government never changes the way it arrives at a figure. Changes in technique are made, but once made, the old figures are reworked to make them comparable with the new. In other words, the 1950 unemployment figures are comparable to the 1980 unemployment figures when both appear in a 1980 publication; figures in a 1950 publication, however, are not comparable with those in a 1980 publication.

As for dishonesty, there has never been a hint of corruption in the calculation of the numbers described here. Since the magnitude numbers are politically sensitive, that is a remarkable record and a credit to the professionals who do this work. There have been errors, though. One Friday in 1979, for example, the Federal Reserve made a \$3 billion error when it announced the growth of the money supply; and that error caused a \$90 billion collapse of the stock and bond market on the following Monday. When the error was discovered, it was corrected, but it was too late for those who had sold in the falling market.

The numbers described here are only the smallest fraction of the nearly seven thousand statistical publications of the bureaus, agencies, and departments of the federal government. A complete listing of those publications is in *American Statistical Index*.

How the Government Measures Unemployment

Unemployment in the United States is usually shown as a percent of the labor force, the percent being called the unemployment rate. Finding the unemployment rate requires two absolute numbers: the absolute number of those in the labor force and the absolute number of the unemployed. The rate is found by dividing the number unemployed by the number in the labor force.

The Bureau of Labor Statistics of the U.S. Department of Labor began keeping employment and unemployment data for the economy in 1940. The unemployment figure most often quoted is the monthly rate, a figure released to the public in the first week of each month. When released, this figure applies to the calendar week, which includes the twelfth day of the previous month. Extensive employment and unemployment information is published in the *Monthly Labor Review*.

The Process

To gather labor force data the Bureau of Labor Statistics makes a monthly survey of some sixty thousand households. The assembling and processing cost of this survey is estimated at \$1.5 million per month.

The households, which volunteer for the survey, represent a stratified sample in proportion to the population distribution as determined in a decennial (two-year) population census conducted by the Bureau of the Census. On selection, each household is subject to an intensive personal interview the first month and telephone interviews the following three months. The household is then taken out of the survey rotation for eight months and returned to be surveyed in each of the following four months;

after that, the household is replaced by another household.

The information gathered about households at the time they enter the survey is comprehensive, providing a reliable view of the everchanging household makeup in the United States. Typical entry questions are shown below in Table 2.1.

Table 2.1

Current Population Survey: Household Member Questions

Name of Household Member: _____ .

Relationship to Household Head:

Head of household

Head with other relatives in household

Head with no other relatives in household

Wife of head

Other relative of head

No relation to head but with relatives in household

No relation to head and no relatives in household

Date of Birth: _____ .

Age Last Birthday: _____ .

Marital Status:

Married—civilian, spouse present

Married—armed forces, spouse present

Widowed

Divorced

Never married

Race: white, black, other

Sex: male, female

Military Service: yes, no

Family Income:

Under \$1,000		\$5,000	to	\$5,999	\$15,000	to	\$19,999
\$1,000	to	\$1,999		6,000	7,499	20,000	24,999
2,000		2,999		7,500	9,999	25,000	49,999
3,000		3,999		10,000	11,999	50,000	and over
4,000		4,999		12,000	14,999		

Housing Quarters:

House, apartment, flat

Hotel, motel (permanent)

Hotel, motel (transient)

Rooming house

Mobile home or trailer

Other

Education:

Grade completed _____ .

Highest grade attended _____ .

When the employment survey itself is made, usually by telephone, data are gathered on each member of the household over the age of sixteen. Some sixty questions are asked, and from those come the mass of data revealing the size of the labor force, the level of employment and unemployment, the cause of the unemployment, and its duration. The processing of the survey data is made at a computer facility in Jeffersonville, Indiana.

Sample questions from the employment survey are shown below in Table 2.2.

Table 2.2

Current Population Survey: Employment Questions

What was _____ doing during the week?
 Working _____ With a job but not at work _____ Looking for work _____
 Keeping house _____ Going to school _____ Unable to work _____
 Retired _____ Other _____

Does _____ usually work 35 hours or more per week?
 Yes _____ No _____
 If no, why? Slack work _____ Material shortage _____ Plant or machine
 repair _____ New job starting during week _____ Job terminated during
 week _____ Could find only part-time work _____ Holiday _____ Labor
 dispute _____ Bad weather _____ Own illness _____ On vacation _____ Busy
 with housework _____ Does not want to work full-time _____ Other _____

Did _____ do any work at all last week?
 Yes _____ No _____ If yes, how many hours? _____

Did _____ lose any time or take any time off during the
 last week?
 Yes _____ No _____ If yes, how many hours? _____

Did _____ work any overtime last week?
 Yes _____ No _____ If yes, how many hours? _____

Did _____ have a job from which he or she was
 temporarily absent last week?
 Yes _____ No _____ If yes, why? Own illness _____ On vacation _____
 Bad weather _____ Labor dispute _____ New job to start within 30 days _____
 Temporary layoff _____ Indefinite layoff _____ Other _____

Has _____ been looking for work during the past 4
 weeks? If so, what has _____ been doing to find work?
 Public employment agency _____ Private employment agency _____
 Employer directly _____ Friends or relatives _____ Placed or answered
 ads _____ Nothing _____ Other _____

Why did _____ start looking for work? Lost job _____
 Quit job _____ Left school _____ Wanted temporary work _____ Other _____

How many weeks has _____ been looking for work? _____

How many weeks ago did _____ start looking for
 work? _____ How many weeks ago was _____
 laid off? _____

Continued on page 7

Table 2.2

[Continued]

Is there any reason why _____ could not take a job last week?
 Already has a job _____ Temporary illness _____ Going to school _____
 Other _____

When did _____ last work either full- or part-time?
 Within past 12 months _____ 1 to 2 years ago _____ 2 to 3 years ago _____
 3 to 4 years ago _____ 4 to 5 years ago _____ 5 or more years ago _____
 Never worked _____

Why did _____ leave last job?
 Personal, family _____ Health _____ Retirement or old age _____
 Seasonal job _____ Slack work _____ Unsatisfactory work _____

Does _____ want a job?
 Yes _____ No _____ Don't know _____

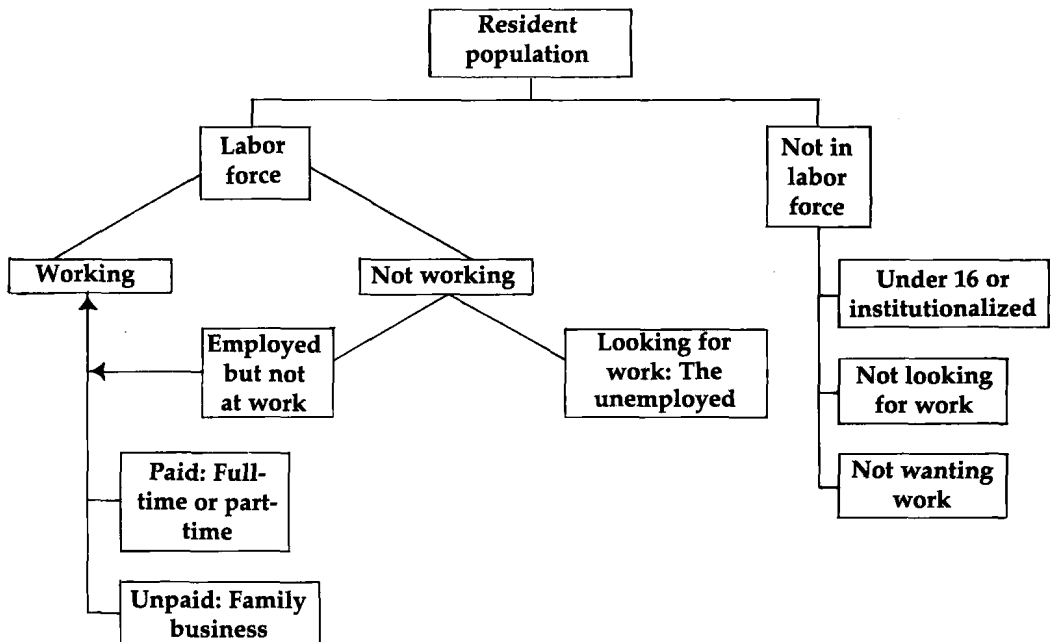
If _____ is not looking for work, why not?
 Believes no work available _____ Couldn't find work _____ Lacks necessary
 schooling _____ Too old or too young _____ Can't arrange child care _____
 Family responsibility _____ In school _____ Health _____ Other _____
 Don't know _____

Does _____ intend to look for work?
 Yes _____ No _____ Don't know _____

For labor force/employment purposes, the survey's results reveal three things: those who are employed, those who are unemployed, and those who are not in the labor force. The schematic arrangement for those classifications is shown below in Figure 2.

Figure 2

Labor Force Schematic



The formula used by the Labor Department to identify the labor force starts with all residents within the United States and makes the following subtractions: (1) all residents under the age of sixteen; (2) all residents over the age of sixteen who are institutionalized (e.g., in prison); and (3) all residents over the age of sixteen who are not looking for work. A college student, for example, who had not looked for work within the last four weeks would not be in the labor force, but one who had looked for work within the last four weeks would be. Neither would a housewife not interested in working outside the home be in the labor force. Also, four weeks after an unemployed worker simply gives up looking for work, he or she is dropped from the labor force.

The employed include four groups: (1) those working full-time for pay; (2) those working part-time for pay; (3) those working at least fifteen hours per week, without pay, in a family business; and (4) those who have a job but are not working because they are on vacation, are ill, are involved in a labor dispute, are prevented from working by bad weather, or have taken off for personal reasons. A person who works two jobs is only counted once as employed.

To be unemployed a person must meet four requirements: (1) be in the labor force; (2) be jobless; (3) have looked for work in the last four weeks or, if not looking, be on a union or professional register for work, or be waiting for recall from a layoff, or be starting a job within thirty days; and (4) be available for work.

Reliability

As with any classification system, the employment/unemployment classification system used by the Labor Department has its problems. One such irregularity often commented on involves teenagers and the discouraged worker. For example, the teenager, who would like to work after school and has looked for such work in the last four weeks, will be counted as unemployed; that kind of unemployment may not be serious, however. On the other hand, the discouraged drop-out, who may be in great distress, is not counted in the labor force.

The sixty thousand family sample, out of our eighty-four million families, may seem small, but in fact statisticians consider it more than adequate for an estimate of national employment and unemployment. It is less than adequate for a geographic breakdown, however. The sample is taken in only 629 geographic areas, including less than one-third of the counties and cities in the United States. As a result of that geographic distribution, the sample is considered to be statistically reliable for only the ten largest states. The survey data for the other forty states must be supplemented by unemployment insurance claim information for various state employment offices.