

18 disagree with nonmonetarist preference for government inter-  
vention and an activist stabilization policy. Instead they  
prefer a fixed-growth-rate for the money supply. Why?  
Our analysis chapter 12 emphasizes the monetarists' greater  
belief in the ability of the private economy to remain stable  
without government help, as well as their distrust and lack  
of confidence that the government is capable of doing more good  
than harm.

Despite my admitted nonmonetarist sympathies, I provide  
theories, arguments, and data (chapters 13-18) for a judgment  
relevant on the dispute.

23 2-2 Figure 2-1 Circular flow of income and expenditure in a  
simple imaginary economy in which households consume their  
entire income. There are no taxes, no government spending,  
no saving, and no investment.

26 2-3 Figure 2-2 Receipts of farmer from miller, of miller  
from baker, of baker from grocer, of grocer  
from consumer. Total consumer expenditure, C.  
Respective added value by farmer, miller,  
baker, grocer. Total value added, Q.

27 2-4 Investment and Saving

Inventory investment. Inventories are goods purchased  
by firms awaiting sales to customers. Increasing inventories  
are positive investment. Decreasing inventories are  
negative investment.

Fixed investment. All final goods purchased by firms  
other than additions to inventories. Plant and equipment.

29 Figure 2-3 Saving leaks out of the spending stream but  
reappears ~~as~~ as investment.

Our simple imaginary economy when households  
save 25% of their income, and firms invest an equal amount.

$$Q = E; E = C + I; S = Q - C; \text{ and so } Q = C + S$$

$$Q = C + I = C + S$$

$$I = S$$

*not a statement about actual T  
but a condition of equilibrium  
i.e. unless I=S circulation will  
contract*

31 High and Low Investment Countries

2-5 Net Exports and Foreign Investment

Exports create income in the exporting country but  
consumption or investment in foreign country.

31  
^not

Imports are expenditures by U. S. residents for goods and services produced elsewhere. They do generate domestic income. Hence

$$E = C + I + X - H$$

where X measures exports and H measures imports.

33 2-6 Figure 2-4: Our simple imaginary economy with the addition of a government collecting \$100,000 in tax revenue, paying households \$50,000 in transfer payments, and purchasing \$100,000 of goods and services from firms. The deficit is made by selling gov't bonds to the capital market. Now three types of final expenditure:

$$E = C + I + G \quad (2.6)$$

Total disposable income (Q + F) includes C, S, and R tax revenue.

$$Q + F = C + S + R \quad (2.7)$$

writing  $T = R - F$  where T is net tax revenue

$$Q = C + S + T \quad (2.8)$$

Since Q equals E the RHS of (2.6) equals the RHS of (2.8)

$$C + I + G = C + S + T$$

cancelling C from both sides

$$I + G = T + S \quad (2.9)$$

subtracting S and G from both sides

$$I - S = T - G \quad (2.10)$$

So when the gov't runs a surplus, investment must exceed saving. When the gov't runs a deficit, saving must exceed investment.

36 Figure 2-5 illustrates equation (2.10)

When investment exceeds saving, there is a gov't surplus (gray area)  
When there is a gov't deficit, saving exceeds investment (pink area)

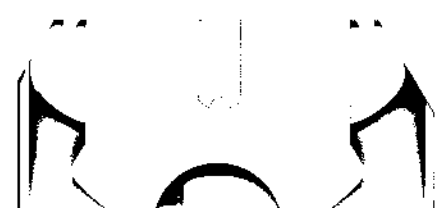
Gray area: gov't surplus finances expansion of investment

Pink area: saving exceeds investment; it purchases the bonds gov't sells to finance its deficit.

Gray area: gov't financing expansion reduces its debt to the public.

38 Table 2-2 What is included & not included in GNP

40 Figure 2-6 Start from lower right corner where expenditures of households, capital market, and gov't are given to business firms. & from Follow leakages to capital market, to gov't, from gov't,



- 39 Leakages from spending stream, amounts 1976  
Capital consumption allowances (depreciation)  $S_d$  \$179.8 billion  
included in GNP, not included in NNP  
Indirect business taxes,  $R_b$  \$163.3 billion  
remainder is national income,  $Q_n$   
Corporate and social security taxes,  $R_c$   $R_s$ , \$187.5  
Undistributed profits,  $S_b$ , \$35.0  
Government transfers and interest payments,  $F_g$ , \$223.0  
not part of GNP, NNP  
Installment and mortgage payments,  $F_p$ , 25.5 billion  
Total personal income,  $Q_p$ , \$1375.4  
Personal taxes,  $R_p$ , 193.6  
Remainder is  $Q_d$ , disposable income, \$1181.8 billion  
Personal savings,  $S_p$ , \$77.8 billion  
Government deficit, \$44.5 billion
- $$(S_d + S_b + S_p) + (R_b + R_c + R_s + R_p) - F_g = I + G$$
- savings                      taxes                      transfers                      injections  
I is gross domestic and foreign investment, \$241.2  
G is gov't purchases, \$365.8 billion  
 $Q_d$  \$1181.8

43 2-10 Nominal income, real income, the price deflator

The implicit price deflator, P, equals the ratio of nominal to real income,  $Y/Q$ .

44 Table 2-3 exhibits calculation of Y for 1972 and 1976 in an imaginary economy producing only steak and eggs

Real income in 1976 is (1976 quantities by 1972 prices)