Bard

Bard College
Bard Digital Commons

Hyman P. Minsky Archive

Levy Economics Institute of Bard College

Fall 1964

A Course in Monetary Theory

Hyman P. Minsky Ph.D.

Follow this and additional works at: https://digitalcommons.bard.edu/hm_archive

 Part of the Macroeconomics Commons

Recommended Citation

Minsky, Hyman P. Ph.D., "A Course in Monetary Theory" (1964). *Hyman P. Minsky Archive*. 230.
https://digitalcommons.bard.edu/hm_archive/230

This Open Access is brought to you for free and open access by the Levy Economics Institute of Bard College at Bard Digital Commons. It has been accepted for inclusion in Hyman P. Minsky Archive by an authorized administrator of Bard Digital Commons. For more information, please contact digitalcommons@bard.edu.

Bard

A Course in Monetary Theory

1964-5
Y211

1. Sept 25: dd no meeting

2. Oct 2. 1. Sketch of Course
2. Discussion of reading

I. Introduction.
A. Restriction of monetary analysis to an Enterprise Economy.

3 Oct 9 - B. Wealth and the ownership of wealth

C. Remarks on Analytical Institutionalism

II. Elementary Keynesian + Classical Systems.

S nature of Keynesian model

dichotomized nature of Classical

Aggregate demand dominance
S, I interrelationships

vs

Labor market dominance

Johnson: Monetary Theory and Policy.

I. The Classical Dichotomy and the Neutrality of Money
   A. Interpretation of Monetary and Value Theory
   B. The Neutrality and Non-Neutrality of Money.

II. The Demand for Money and the Velocity of Circulation.
   A. Developments in Liquidity Preference Theory
   B. Restatement of the Quantity Theory
   C. The Distinguishing Characteristics of Money.
   D Empirical Research on the Demand for Money

III. The Supply of Money, Monetary Control and Monetary Dynamics
A. The Supply of Money
B. Monetary Control & Reserve Base
C. Monetary Dynamics

IV Monetary Policy
A Objectives and Instrumental Role of Monetary Policy
B. The Effectiveness of Monetary Policy
C. The Adequacy of Tools of Monetary Policy

V Concluding Remarks

Introductory Remarks.

A. Monetary Theory

Presupposes:

1. At least 1 good solid year of undergraduate economic theory

2. Knowledge of monetary and financial institutions and their behavior. I do not feel that I should have to explain what is meant by open market operations or how banks create money or really any terms I use here.

3. 235 A is the course in monetary theory.

235 B is a course in monetary institutions and policy: A is the theory. B is the applications: may be somewhat different this year. Ellis & I meant getting together.

4. It will be obvious that I cannot resist making remarks about economic policy and the uses of economic theory as we go along.

5. I will diverge from outline when something of interest occurs to me.

6. Patinkin is not in print apparently: get along without it. ~~I will introduce topics from it~~ I will adjust to him as we go along.

7. Expect you have bought:

~~a. A.E.A.~~

b. Gurley & Shaw

c. The State of Monetary Economics

8 7 a large modern empirical literature on monetary phenomena. Will specialize in this in 203 2 semesters

9. Really begins with the General Theory as a starting place in this course. May want to look at a handbook such as Ackley to refresh your memory as to the various ~~recent~~ "models" - especially the Keynesian & the Classical models and the interrelationship between these models

10

I. Introduction.

~~There is always a danger that the need for a precise analysis of ideas will~~

The problem of monetary theory is how does the fact that an enterprise economy uses money affect its behavior. A number of facets of this statement of the problem require further examination. The dimensions of the economy's behavior affected and the content of the term money have to be made precise. In addition the statement of the problem restricts our attention to the behavior of an enterprise economy: and this restriction does in fact set the frame of reference for our analysis.

A. Restriction of Monetary Analysis to an Enterprise Economy.

The distinguishing attributes of an enterprise economy are not that decisions are decentralized and that market determined variables are parameters for individual decisions. As the Hayek-Lerner analysis of Socialism has shown, an economy without the private ownership of produced means of production can be based upon decentralized decisions. In fact the individual decision unit can either naturally or be ordered to base their decisions upon the same profit or utility maximization rules that presumably guide decisions in an enterprise economy.

It may also provide for an enterprise economy to operate in which markets

We now know that the existence of a plan, the dominance of market determined variables in decisions by variables that reflect conscious guidance of the economy, is consistent with the existence of ~~[illegible]~~ an enterprise economy. French planning is evidence for the truth of this assertion.

The basic factors distinguishing [illegible] of an enterprise from a ~~socialist~~ thoroughgoing and socialist society is the private ownership and marketability of productive wealth. ~~and~~ Because households manage the allocation of both their income and their marketable wealth among alternative uses or outlets and because income can be allocated to change wealth and wealth can be ~~con~~ consumed ~~allocated to augment~~ as income, the private ownership of wealth implies that the rate at which wealth changes must be consistent with the preferences of the ~~community's~~ units that make up the community.

Any attempt at a precise statement of the interrelations between the rate of accumulation and preferences of households must recognize that these parameters determining this relationship can be varied. Income distribution is an obvious determinant of how much would be saved at various income, interest rate pairs: and income distribution is sensitive to fiscal policy parameters. The consistency of the rate of accumulation with preferences of individual units therefor does not preclude planning but it does do is set out the conditions to which the plan must conform. Guiding an enterprise economy is a more difficult and subtle task than guiding an thoroughgoing Socialist economy.

There are two reasons for emphasizing the overall consistency of planning with an enterprise economy. One is that money is very much a "policy" oriented part of economics. Monetary policy does at least in the short run affect barometers upon which decisions are based. However monetary policy actions are undertaken for their effect upon the overall operation of the economy and whether monetary policy actions do have other effects and the nature of these other effects is almost always overlooked in the analysis of monetary policy. The planning effect exists but it is unnecessary, not purposive. Monetary policy has allocational and distributive influences as pervasive as fiscal policy: the only question is that we may in fact be ignorant of their nature because of the subtlety of monetary phenomena.

Another reason for emphasizing the ~~problem~~ ~~aspects of monetary~~ consistency of planning in guiding with an enterprise economy is that the impact of money and monetary changes depends upon the process and paths by which money affects decisions. These processes and paths are dependent upon the financial institutions that exist and their behavior. Financial institutions and usages are ~~almost~~ to a great extent determined by laws and often are guided by regulatory agencies. Thus the dimensions of planning and guiding in an enterprise economy include the definition of the behavioral rules for monetary variables

B Wealth and The Ownership of Wealth.

First fact is that the production process uses "physical capital": that is there exists stock of items which will yield valuable services in the future. The term capital covers a multitude of ~~ideas~~ items: durable goods that yield streams of services over time, one that "inventory's" into production process, consumer goods inventories of items produced discontinuously and the valuable skills of humans.

~~Both~~ and human capital have ~~This~~ non-human, ~~a~~ present values which reflects the expected value of the services they are ~~expected~~ capable of producing and a discount rate. Some of these present values appear as private marketable wealth, other productive capacity appears as private wealth which cannot be alienated from its owner and still other sources of income producing capacity appear as "publically owned wealth".

(7.1

In addition, private negotiable wealth ~~appears as~~ exists because debts of public bodies are generated as a result of ~~government~~ financial practices.

The fundamental production concept is the existence of stocks that generate flows. The stocks are capable of generating flows over an extensive time period. The flows are the inputs to the production process, but for the flows to take place it is necessary for the capital, or wealth, that is the stocks to exist. This stock-flow interrelation is a fact of life: the overall name given to the stock we are considering is non-human wealth - the general name for the flow we are considering is income.

Monetary theory is basically concerned with the stock-flow interrelations. As such all that is subsumed under the headings ~~money~~ capital ~~theory~~ or investment theory is essential to monetary theory.

In a sophisticated or advanced enterprise economy (and government debt) the ownership of productive capacity by households can be direct or indirect: and direct ownership can enjoy various protections due to legal forms. The direct ownership of private transferable productive capacity by a household (to an overwhelming extent) takes the form in a modern economy of (either) owning shares or debts in corporations or other business enterprises or owning real property - mainly housing. In a private enterprise agricultural society a major form of private wealth takes the form of farm ownership - but for all practical purposes we can interpret this into the private ownership of business enterprises.

In addition to the direct ownership of private wealth, households can directly own debts of public authorities. At any date, private transferable non human wealth consists of the sum of the market values of private productive wealth and government debts.

Indirect ownership of wealth exists when institutions arise which while emitting their own liabilities acquire as their assets liabilities of other units. Indirect ownership also implies layering: the gross value of assets outstanding is greater than the value of ~~private debt~~ private wealth and public debts

In the sophisticated advanced enterprise economy not only is the market value of a large amount of wealth imputed to households but there is a proliferation of financial instruments and practices which leads to the indirect ownership of real wealth by households.

A wealth owner no longer needs own a farm or a factory or the liabilities of institutions that own the farm or the factory. He now can own deposits, equities in pension funds and life insurance reserves.

A modern sophisticated enterprise economy not only exhibits the decentralization of ownership by means of the corporate form but also the layering of financial relations by means of financial intermediaries. A problem of

monetary theory is to determine how it all this complex financial layering of the economy affects system behavior.

A representation of an enterprise economy is the ~~complex~~ set of interrelated balance sheets. To each unit - household, government, business firm - a balance sheet is attached. The balance sheet's main body states the marketable assets and liabilities of the unit. For simplicity's sake we assume that all "business firms" are organized as corporations - so that households do not own "productive capacity."

The existence of consumers capital obviously modifies the above.

~~Firms~~

The financial structure of an economy is the set of balance sheets, the interrelations among balance sheets - which reflects layering - and the various special rights and privileges of liabilities - assets. The special rights and privileges I call ~~layering~~ financial protection: and in a complex, namely the ~~financial~~ sets of instruments and standing, allows a wide variation in the positioning of risks

We will **first** take up the set of books and layering. We will then take up the partitioning of risk and the contingent liabilities that underlies many of the balance sheets in an enterprise economy; & contingent liabilities of government.

~~As stated earlier to each unit we associate a balance sheet. In the main body of the balance sheet we state its assets, marketable, and its liabilities.~~ ~~For any firm the assets consist of non-human capital (if only direct financing exist) and the liabilities of other units~~ ~~Its liabilities~~ consist of

~~If only direct~~

In a closed economy, ~~with only~~ ~~household~~ ~~the assets~~ liabilities of the set of units

As stated earlier to each unit we associate a balance sheet. In the main body of the balance sheet the units marketable assets and its liabilities are stated. In a balance sheet A unit's assets consists of its ownership of non-human wealth and its ownership of the liabilities of other units: its assets are "tangible" or "financial." In a closed economy, the set of books are closed in the sense that the liabilities of one unit are the financial assets of another

Consolidation of Balance sheets:

Two or more balance sheets are consolidated when the assets and liabilities are added as if it were 1 unit and any item which appears both as an asset and liability is cancelled.

If only households and firms exist then a consolidation of all household and firm

balance sheets will yield

1] No financial assets only tang. the asset

2] No Liabilities aside from Net Worth.

Hence: in a closed economy consisting only of households and firms: household net worth will be equal to the value of the tangible assets - i.e. = non-human wealth.

If a government exists + if its balance sheet consists only of Liabilities - pure dead weight debt then the ~~consolidated~~ assets of consolidated private sector Households + firms will consist of tangible assets plus the government debt = the net worth of the households will then be equal to the value of ~~land~~ tangible assets + debts

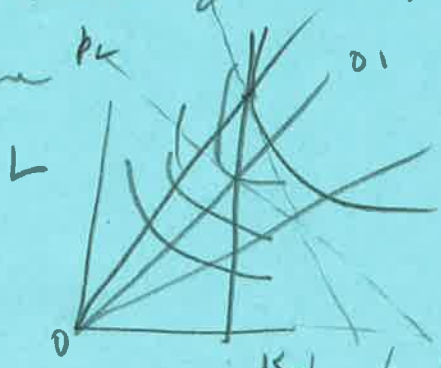
a system of direct finance in

A. In an enterprise economy each firm's financial asset represents a claim to ~~an~~ ~~share~~ payments which can be considered as being financed by the contribution to production of the tangible assets of the unit emitting the financial asset. The characteristics of the firm's production process and the attributes of households preferences systems may lead to widely differing supplies and demands for particular financial assets at particular ~~terms~~ contractual conditions. This "disequilibrium" situation leads to possibilities of arbitrage.

The above should be made precise by citing specific examples and counter-firms. Business firms have assets which will produce a stream of earnings over a long period of time. The financial commitment they must be willing to make is to make payments over a long period of time. In addition firms do have short lived assets to finance the acquisition of these assets they will ~~make long~~ enter into short term financial commitments otherwise even in this case they would ~~be willing~~ prefer to enter into into long term contracts - unless in some dimension long term contracts were more onerous than short term contracts

The "cash flows" associated with a production process can be illustrated by a modification of a the Hancock cost curve of elementary theory. Let us assume a production ~~process with fixed quantities of capital two classes~~ ~~usual isoquant curves~~ function with two classes of inputs labor and capital. The capital inputs are the services of durable fixed capital goods which for purposes of our example are owned by the firm - and short lived variable capital ~~durable~~ which for purposes of our example are strictly complementary with labor. and hence enter into the marginal cost curve.

With a fixed quantity of durable capital, the

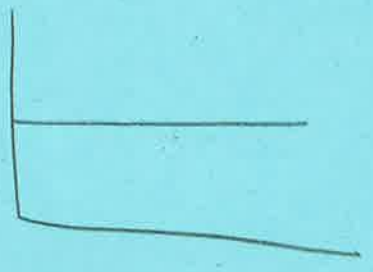


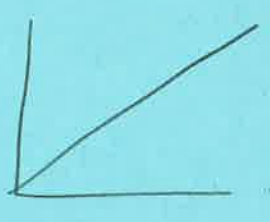
possibilities open to the firm are

given by the iso-capital line
K_0. Assuming a given wage-capital cost ratio, an

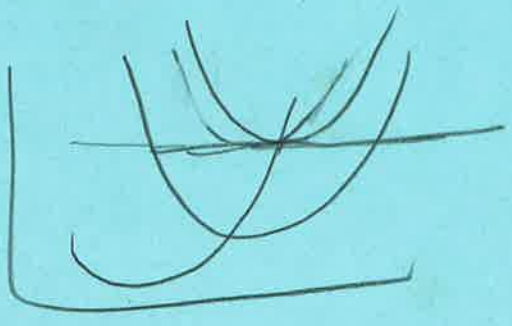
both factors variable are expansion paths
O-O_1 is derived. In example taken we assume
constant returns to scale. Then the cost curve

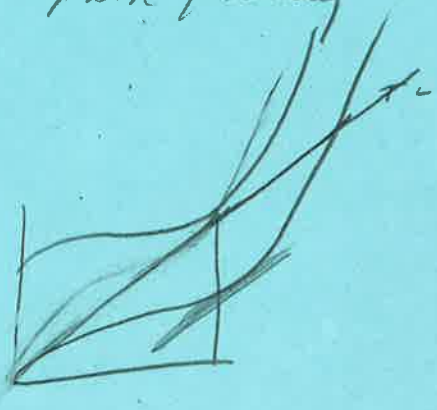
along a particular expansion path exhibits
constant returns to scale. (This a variable labour +
capital ≠ fact





The variable cost curve along the
Constant capital expansion path of Young
looks like this:





The difference between the A.V.C ~

$\nabla VL + \nabla R$ is the "cash flow" applicable

to the ~~more~~ overhead labour + ~~fixed~~ capital charges.
against fixed capital.
This flow ex-overhead labour

1) Layering of Money as a product of LAYERING vs Money as a thing.

2) Partitioning of Risk:
   a) distributing independent variance
   b) ~~the~~ protection

3) Contingent Liabilities
   of a Bank —

Investment Decisions
Result of a portfolio
adjustment process

Transmission Mechanism:

4. ⊕ Money + Capital Markets:

Money MKT INSTRUMENTS. — Wholesale MKT
1. Bank liabilities < Negotiable C.D's
                      Prime Rate
2) Non-bank financial INTERMEDIARIES

Banks as source as users

~~Introduction~~

The fact that money is of particular relevance for the performance of economies with complex financial structures leads us quite naturally to the objective that the proposition of monetary theory may be put in the conditional proposition that their truth depends upon the nature of the monetary and financial institutions and not on any inherent properties of a decentralized exchange economy. Query: Has the significance of money in determining system behavior changed with the evolution of financial complexes —

value of a
- ① Significance either implies a non-zero value of a 'parameter' in a regression model or
- ② new variables become "statistically" significant

It's not too different — but if we think in terms of a limited # of variables in a model they are somewhat different

L1 P5

We have been talking of the relevance of money in determining system behavior for some time without specifying the dimensions of system behavior. The traditional dimensions of system behavior are four:

A. Allocation of resources among uses

B. Distribution of income

C. Stability: shocks in terms of
   1) the relation between achieved output (employment) and full employment or potential income
   2) the price level.

D. Growth: rate of change of potential income plus the rate of change of welfare generating attributes which do not result in marketable output (leisure) and leisure and two dimensions of welfare which are not included in the conventional rate of change of gross national product definition of income.

Discussion of the dimensions of system behavior:

1. Allocation of Resources: How is the allocation of resources affected by the nature and the behavior of the money supply? This problem is usually examined only in terms of the determination of the detailed bill of goods produced but in terms of the overall division of current output between C and S, the division of output between I and C affected by the existence and use of money. This becomes the big economic policy question: Can monetary policy permanently, or even temporarily, not at all affect the split of full employment income between S and I. Note that if you accept the view that the percentage of income invested determines the rate of growth then the allocation of Resources question affects the whole part D: hence from the point of view D is redundant.

There is another more subtle way in which monetary phenomena may – not I say may and not will – affect the allocation of resources: that is by way of the effect of interest rate variations upon choice among investment opportunities. Consider two investments – i.e. current ~~use of~~ resources used to yield future incomes – one short lived and the other long lived – which are equivalent ~~[illegible]~~ at the initial short and long rates:

~~[illegible]~~ to the short and long rates: then the two investments no longer are –

Example Short 1 year
Long perpetuity

Short 103 1 yr from now
Long 5 per year in perpetuity

initial position short rate 3% long rate 5%

both short & long present value $100: an investor is indifferent between the two if current cost of construction is ~~[illegible]~~ same

Assume Short rises to 4% & long to 6%
Short asset worth $99 – long worth 83 1/3 same price: short preferred by in fact 1% rise in long needed as 1 8/30 rise in short to (app)

fall to 2 & 4% short worth 101, long worth 125
~~short rate 60 in order to choose short~~
present price of short to 80 + to yield 125

Consider 2nd Assets: 1 to last 1 yr
to last ∞

Some sort of production

Short $103 1 yr for sure
long $5 yr in perpetuity

Mkt interest rate 3% short
5% long.

+ 2 real assets both worth $100 in market

Consider riseau interest rate to 4% short, 6% long

Short life asset worth 99, long lifted asset worth $86 2/3.

for ~~instant~~ long asset to be worth the same
short rate would have to be index of mkt against 16 2/3

---

follow interest rates:

2% short
4% long

price of 103 1 yr for sure 101
$5/yr in perpetuity 125.

for long ~~H~~ for short long

L198

I may have the same values - even though they may still have different production costs. If monetary policy can affect ~~investment~~ interest rate level as well as term structure it can affect the choice between short and long ~~term~~ investments.

(Study) Note discussion under 11

Distribution of Incomes

What have much to say. However to the ~~effect~~ extent that a complex financial system allows smallowners of impersonal wealth to receive a return & financial intermediation & competition among financial instruments results in a lower rate structure, the growth of sophisticated financial usages tend to decrease the relative return to the large owners of wealth.

~~I~~ I-T Kaleçki - Kaldor / Kaldor theory of Income Distribution

Income distribution theory out of Keynesian framework Workers no save, profit saved

Profit ~~[illegible]~~ of Y, $Y \ni P = I \rightarrow$

P/W division determined by I as a ratio of saving to income

C. Stability

Monetary theory & Cycles

mechanisms & evidence

Principal

Quantity theory.

D. Growth.

Determinants

Analytical Introduction to the nature of monetary theory:

Always must question what effect has actual institutions have upon behavior.