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Prices in a Capital Using Capitalist Economy II

Hyman P. Minsky Ph.D.

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I have called this book the General Theory of Employment, Interest and Money; and the third feature to which I may call attention is the treatment of money and prices. The following analysis registers my final escape from the confusions of the Quantity Theory, which once entangled me. I regard the price level as a whole as being determined in precisely the same way as individual prices; that is to say under the influence of supply and demand. Technical conditions, the level of wages the extent of unused capacity of plant and labour, and the state of markets and competition determine the supply conditions of individual products and of products as a whole. The decisions of entrepreneurs, which provide the incomes of individual producers and the decisions of those individuals as to the disposition of their incomes determine the demand conditions. And prices - both individual prices and the price-level - emerge as the resultant of these two factors. Money and the quantity of money are not direct influences at this stage of the proceedings. They have done their work at an earlier stage of the analysis. The quantity of money determines the supply of liquid resources, and hence the rate of interest. and in conjunction with other factors (particularly that of confidence) the inducement to invest, which in turn fixes the equilibrium level of incomes, output and employment and (at each stage in conjunction with other factors) the price level as a whole through the influences of supply and demand so established.

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Prices are determined by the conditions of supply and demand in the myriad of markets that make up an economy. But the individual commodity and factor prices are determined in a framework that includes the level of overall demand and the conditions in the markets that determine costs. The part that money and the financial institutions of a market economy play in determining particular prices and outputs is derived from the part money and finance play in the determination of aggregate demand through in particular the investment that takes place in the economy. Thus we have to turn our attention to investment.

In a capitalist framework the value of investment goods production, (PiQi) depends upon

1) The capitalized value of the expected quasi rents from the utilization of the investment goods in a particular production process being greater than the current price of producing the investment good by a wide enough margin so that it is worth while for a prospective user of the investment output in production to accept the financial commitments embodied in various debts and equity instruments, and

2) bankers and other financing sources being willing to take part in the required financing. This means that the gross profits that the bankers expect to be realized in production exceeds the sum of the explicit cash payment commitments on debt by a sufficient margin so that the implicit cash payments commitments on equity instruments used in the

financing package will be forthcoming. Realized gross profits from operations by the universe of firms need to validate the paper world, but - and this is vital - the gross profit margins out of which the cash payments to bond and equity holders will be met are, in the absence of state intervention, equal to future expenditures on capital assets. That is, if we assume that all of workers income is spent on consumption and there is no state and no "rest of the World" we have

1)	$P_cQ_c - W_cN_c = PR_c$	(PR = Profits)
2)	$P_iQ_i - W_iN_i = PR_i$	
3)	$P_cQ_c = W_cN_c + W_iN_i$	total revenues = total spending so that
4)	$PR_c = W_iN_i$ and	
5)	$P_iQ_i = PR_i + PR_c$	for all t
5")	$I = PR$	Investment = profits

Thus in a simple world each periods profits, the PR_i and PR_c, - the quasi rents of Keynes - that will validate debt and enter into the determination of asset prices depend upon investment in that period. In the more complicated world in which we live out our lives the validation of investment of any date depends upon investment in the future along with the course of state employment and transfer payments and the

revenues yielded by the tax system.1 (This assumes a closed economy)

Future investment on the other hand depends upon anticipations of future earnings and the future normal or proper functioning of these markets in which investment is externally financed. A truth about the functioning of the pricing process in a capitalist economy that is revealed by the way in which profits respond to investment is that the "budget constraints' that rule for consumption and investment expenditures are determined in quite different manners.

The budget constraints for consumption expenditures are to a large extent determined by the ongoing income streams of households, which mainly consist of wages but also includes government transfer payments and property incomes such as pensions. These ongoing income streams are modified by additions in the form of new debts and subtractions in the form of payments on accumulated debt balances. The extent to which consumption spending is dependent on household wage income is now much smaller than when Keynes drew the distinction between consumption and investment spending on the basis of the dependence of available finance upon wage receipts. Because of the immense growth in

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1 Equations 1-5 embody the well known aphorism imputed to M. Kalecki that "Workers spend what they get and capitalists get what they spend." In terms of our argument equation 3 embodies the idea that current functioning determines current consumption and equation 5 generates two propositions: current investment determines current profits and expected future profits determines current investment

government transfer payments and the greater availability of credit especially through credit cards the financing of household spending is now much less tightly related to household incomes from wages.[2]

Budget constraints for investment spending are combinations of internal and external funds. The internal funds are the anticipated gross profits minus debt servicing commitments and taxes and dividends. The external funds are combinations of borrowing from banks and other financial institutions, the sale of open market debts of varying kinds, and the sale of new equity liabilities. The way external financing is carried out at any time depends upon the institutional structure and market variables. Central bank and Government operations can affect both current market conditions and the institutional structure.

To repeat, the budget constraint for investment is a combination of anticipated internal funds net of payment commitments due to prior financing and the funds that can be borrowed from banks and by the sale of open market paper, bonds and equities. The ability to lever internal funds by external funds is constrained by the risk aversion of both the firms raising funds and the individuals and institutions

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2. This proposition that consumption expenditures are determined by wage and other incomes, including transfer payments, is not as true in the 1990's as it was in earlier times because of the proliferation of credit cards which makes debt financed spending available to households. It may well be true that the tight times of the 1990's will separate the population of households into those to whom credit card credit is readily available and to those to whom it is not.

that furnish funds. The risk aversion of the demanders and suppliers alike are determined by their views of what is likely to happen and their preference system for risk. Both the views of what is likely and the preference for risk are affected by the performance of the economy.

The basic transactions in an investing capitalist economy are those that take place in the conference rooms of bankers and business men where pro formas are scrutinized. Pro formas are projections of income statements and balance sheets through time: they are prepared on the basis of past performance for ongoing operations and engineering and marketing studies for new ventures.

A cliche among loan officers and investment bankers is "I have never seen a pro forma I did not like". The seeker after financing always presents a favorable view of the cash the project will generate. Even in government military procurement the phenomena of cost over runs is a reflection of the almost universal optimistic cost projections of the military and military contractors. Seekers of financing are optimists.

When in a previous incarnation I helped indoctrinate loan officers into their arcane trade. I suggested that they should learn how to raise either their left or their right eyebrow and with their eyebrows raised say really with an upper class drawl. Loan officers, which I take as the generic term for the specialist in financial matters who is responsible for the performance of funds being placed for

future returns, should be the congenital pessimist or the professional doubter.

In a well functioning economy almost always there will be ample investment opportunities, nevertheless it is true that there always are infinitely more investment projects which can be imagined that will never pay off; never return more money than the cost of the investment. At any moment potentially poor investments outnumber investments that will validate the price paid for the investment and the financial instruments issued to put the investment in place.

Entrepreneurs, who prepare pro formas and loan officers who evaluate pro formas live in the same emotional climate. As the emotional climate swings from the optimism of a boom to the pessimism of an era of non performing assets in a recession and depression, the emotional climate of an economy shifts.

In a boom both the preparation of pro formas by business men and their critical evaluation by financiers are tinged with optimism. Non performing assets will cast a damper on both entrepreneurs and loan officers in the aftermath of a boom. Potential borrowers will feel that they are being treated unfairly in the period when non performing assets loom large in the memory of financiers. This is especially true when they compare their post boom treatment with the way their pro formas were evaluated in the prior boom. A money crunch is a natural result of the endogenous nature of expectations in our economy. This

tendency to swing from unwarranted optimism to inappropriate pessimism in evaluating investment projects is perhaps the fundamental weakness of the capitalist way of handling the capital development of the economy.

Money and finance in general affects the performance of the economy by determining the external financing that is available and the terms upon which it is available. Money and financial market conditions also affect the price that is set on the existing assets and the history of financing terms affects the debt servicing commitments of firms.

The investment that is financed determines realized profits. In an economy where workers save the savings out of wages is also affected by aggregate investment for it is investment through the "multiplier" that determines aggregate wages. After the accounts are drawn up for an time period savings equals investment. The variables that adjust to bring this about are the level and distribution of income. The ultimate owner of wealth in advanced capitalist economies are mainly the owner of financial instruments. The specific claims of such ultimate owners are combined by means of financial intermediaries to claims upon the earnings of a portfolio.

A high investment economy yields a price system that generates large enough mark ups over wage costs so that profits and worker's savings takes place. A high investment economy, by yielding high profits sustains - and even raises - the market price of capital assets and generates

sufficient gross profits to validate debt. Inasmuch as felt uncertainty in the form of the implicit yield on money and other secure assets is a factor in determining the ratio of the value of capital assets to expected future capital asset income, a period of high realized investment will tend not only to increase the size of expected future capital incomes but will also increase the subjective surety of such capital asset income. Thus a period of successful functioning of a high investment capitalist economy will lead to a rise in capital asset prices relative to both current wages and current profits. The capital gains that result from such a rise in capital asset prices will induce both additional debt-financing of current investment and of positions in capital assets. a successful high investment capitalist economy is unstable upwards. That is, if sustained, a high investment - high profits economy will lead to rising asset prices and an increase in the felt surety of private debt. Thus by validating past private debt financing decisions, a high investment - high profit economy will induce both increased investment and an increase in the ratio of debt financing to both investment and the current values of assets.

However there are limits to how rapidly the composition of output can shift towards the production of investment goods, but there are no limits, except those imposed by bankers ever changing views as to what is prudent, about the composition of debt and the extent of debt financing. Thus

the ability of the economy to generate cash flows that validate ever expanding debt is limited. However for a time accelerating inflation can offset this tendency. Over a period in which, on the whole, the economy is functioning well the technical conditioned of the capitalist financing process leads to an economy being poised on a knife edge, one direction being accelerating inflation and the other direction being a debt deflation. Historically debt deflations have triggered deep depressions.

Capital Intensity, Multiple Markets and Multiple Products.

In a capitalistic economy, prices must be such that sufficiently large Quasi-rents (profits) are generated so that the debt structure (both the direct debt of units owning capital assets and the indirect debt of financial intermediaries) is validated and capital-asset prices are high enough to induce the production and financing of additions to the stock of capital assets. To this fundamental condition for the normal functioning of a capitalist economy let us add the following "empirical" characteristic of the production process of advanced capitalist economies: Many firms in such economies use capital intensive production processes and produce a number of products which they sell in a number of different markets.

For our purposes the indicator of the relative capital intensity of a production process is quite simple. The

capital intensity of an adopted or currently contemplated production process is indicated by the ratio of profits to total out of pocket costs, (after taxes and other identifiable prior claims to the revenues) that will be required to validate the financial commitments that will be entered upon if this production process is adopted. That is it must be anticipated - the pro formas must indicate - that what Keynes called the quasi-rents will be large enough to meet the financial commitments on debts and maintain, if not increase capital values. The greater the ratio of such required quasi-rents to labor costs, i.e. the greater the mark ups on average wage costs that are required to validate investment the greater the capital intensity in production. However in a world with uncertainty, the current validation of past financial commitments and past equity values is evidence as to whether a rational agent can expect current commitments to be validated.

Thus the capital intensity of the existing modes of production can be measured by the ratio of quasi rents after taxes and other claims, to wages that is required to validate past decisions to put the current capital stock in place. Furthermore if the economy is running well the present quasi rents will on the whole be validating such past commitments.

The existence of capital intensive production processes means that a substantial fraction of a representative firm's total revenues has to be allocated to servicing debt and to

sustaining the price of capital assets. If such an economy is running well the average out of pocket costs per unit of output for outputs produced by capital intensive processes will be a relatively small fraction of the required price of a unit of output. This means that sharp price competition, in the face of excess capacity, and inelastic produce demand can quite easily lead to zero or disastrously small quasi-rents.

When the gap between the price required to validate debt and sustain asset prices and the out of pocket costs is large, then there are large potential penalties, in terms of the consequences of the failure to validate debt and falling asset prices, that price competition can extract from firms, the bankers to firms, and the holders of banker's liabilities. Risk adverse investors in and financiers of such capital intensive modes of production processes will require the assurance that the firms using such processes possess "market power": They require oligopolistic or monopolistic competition arrangements before they will hazard their resources on specific capital assets required for such production. Before bankers will accept the debts of firms that use capital intensive production processed they require assurances that strong price competition will not occur. Oligopoly and monopolistic competition are natural market structures in these circumstances. When external finance and capital intensity simultaneously exist (capital intensity, by requiring large blocks of investment

and finance, virtually guarantees the necessity of external finance) bankers require some guarantee that price competition due to minor and transitory excess capacity will not quickly and readily erode the required quasi rent per unit of output. It is no accident that J. P. Morgan and Company induced "orderly behavior" among American Railways in the 19th century. From the point of view of the paper world, price competition among producers who utilize capital intensive techniques is "anathema".

From the point of view of debt validation and asset price determination the only purpose of production is to collect the quasi rents given by the difference between total revenues and out of pocket costs. That is production is for profit and not for use. If the capital assets embodied in the production process of a firm yield multiple products which are sold in multiple markets the organization and its bankers are not really concerned with which market and which product generates the required quasi rents. Their primary concern is that the sum of the quasi rents from the various markets and products be large enough to validate debts and sustain asset values.

The maximum of the quasi rents that can be obtained by a firm is given by the full exploitation of the negatively sloped demand curve - the negatively sloped demand curve reflects the firms market power - that confront it in each market it serves. The minimum required quasi rents is given by the debt structure and the cash flows required to sustain

capital asset values. If the maximum is greater than the minimum, then the firm can enjoy the luxury of not fully exploiting the profit potential of its market power. Political and dynamic strategic considerations determine the extent to which a firm will in fact maximize quasi-rents in each of the several markets it serves.

Diagrams of avc , mc, and demand.

The fundamental tools for the analysis of supply conditions in an investing capitalist economy are the cost curves of firms defined as units for the purpose of financing and the demand conditions they face. The demand conditions a firm faces are determined by the size and distribution of income and as Keynes indicated the nature of the competitive conditions in the markets in which it sells.

In essence firms either have or do not have market power. If a firm does not have market power then the demand curve it faces is horizontal. The price of the product they sell is independent of any action they can take. In such a firm the demand curve facing the firm is a horizontal line at the price determined by market (industry) supply and demand.

Each firm in this industry has a total variable cost curve and a marginal cost curve. For purposes of simplicity we assume that the representative average variable cost curve is U shaped - a competitive industry can exist only if there are some diseconomies of scale and for simplicity purposes we assume the diseconomies are related to the operating or production costs. Due to modern communication and control techniques it may be that finance sets the limit to the size of firms rather than production or operating costs.

With U shaped average variable cost curves there is a marginal cost curve that pierces the average cost curve at

its minimum point. To these variable operating costs we add the fixed costs such as managerial overheads and the budgeted amounts for fulfilling the commitments on the liabilities. Each fixed cost that is added yields another average cost curve, although the marginal cost curve is unchanged. The result is a nested set of average cost curves each of which is pierced at its minimum point by the unique marginal cost curve.

We now wave to identify the cost curves for a period - say a quarter - and specify whether the cost curves are summaries of historical data or projections. If they are projections then the cost curves represent the cost side of the pro formas that are presented by firms as they negotiate with bankers and other suppliers of finance. If a demand curve is added then the full content of the pro formas are represented in these diagrams.

Returning to a firm that is confronted with a horizontal demand curve. The firm will maximize its returns when marginal cost equals this price: the particular average cost curve of the family of cost curves that has its minimum point at this price will have to include not only the direct costs but also the overhead and financing costs. If market demand is stronger than in the first estimate then the price will be higher and the revenues that can carry the overhead including finance costs will be higher, if market demand is weaker then the revenues that can carry overhead including finance costs will be lower. Firms in competitive industry

are vulnerable to decreases in demand. This increases the risk associated with financing such firms. The generalization is that fully competitive industries will not be capital intensive industries.[3]

The greater the capital intensity of an industry the greater the gap between average out of pocket costs and the per unit revenues that are needed to validate the investment and the liabilities. The financiers, the bankers will require some assurance that prices are not forced down to the average variable costs with every shortfall of demand below some projection: financiers will be happier in financing capital intensive industries if there is some protection against competition. One way to get such protection is by the firms possessing market power either through some market monopoly, through some government licensing or even government ownership.

In many market situations there is a trade off between capital intensity and competitive market arrangements. This Schumpeterian trade off is a pervasive phenomena. In the modern economy, market power is often created by advertising rather than by the technical characteristics of the production process.

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3. Prior to the New Deal legislative reforms in the United States agriculture was a mainly competitive industry in which production was not capital intensive. The various market price interventions replaced the competitive market with some set of minimum prices. As a result a farmer's signature on a financial instrument became bankable and the capital intensity of agriculture increased.

These nested cost curves also help in understanding the ex post profit realization process. After the event, in the accounting of what happened during a period, the total of profits broadly defined will equal investment plus the other determinants of profits. In the various industries where firms have market power profits will be determined by the pricing strategy of the firms, given the location of the demand curves. In the competitive industries total the horizontal price line will be higher, how much in each industry depends upon the distribution of demands due to higher incomes among products, and as a result profits will be higher. The sum of the realized profits in all output is determined by the macroeconomic conditions, preference systems and market structures determine how these total profits will be distributed.

Once we accept that production techniques are such that a substantial part of the gross revenues need to be allocated to validating debt and sustaining capital asset values and that firms which use such production technique typically produce multiple products and sell in multiple markets then an indeterminacy is introduced into the pricing of particular products. A firm, and its bankers, really care little about the proportions in which the required quasi rents are collected from the various markets, and a range of mark ups on out of pocket costs for the various outputs in the various markets in which they are sold will combine to yield acceptable total quasi-rents. In these circumstances possibilities of cross subsidization in the pricing process exist. Firms as they vary the mark up on out of pocket costs among markets and products engage in a political decision process. Conventions such as mark up pricing and regulations such as setting a target rate of return on some value of capital assets can and do guide price formation. The very fact that issues can be raised about how prices should be set, such as the interest in time dependent and season dependent utility rates, is evidence that arbitrary elements determine particular prices in a capital intensive world.

In a regime where price includes a substantial mark up on wages costs, the possibility arises that the fee paid for one commodity is paying for quite another commodity or service. The United States system of free television is

paid for by an allocation to the television network and to "talent" of part of the gross quasi rents of the various advertisers. The ability to allocate quasi rents to finance such extraneous outputs is further evidence of the arbitrary nature of pricing in capitalist economies. The way television is paid for indicates that in a capitalist economy the mark up on wage or out of pocket costs is a form of taxation. In our economy fees paid for one set of commodities (laundry soaps and underarm deodorants) are used to supply another set of services (entertainment). The mark up on marginal or labor costs in product prices not only validates debt and capital assets and pays for Madison Avenue but it also finances an array of transfer payments (Social Security, Medicare). Madison Avenue, corporate bureaucracies, and government expenditures are particular allocations of a gross surplus; the required profit rate and business taxes are determinants of the target mark up on labor costs.

Advertising creates and positions a negatively sloped demand curve for a product. The security of market incomes that this negatively sloped demand curve allows investment in the required production facilities to be financed at more advantageous terms than would be true if there was no advertising created market power. An economy in which such considerations enter into price and production facility determination is far removed from the economy modeled in the neo-classical economic theory. Once the net quasi rents

required to validate debt and sustain asset prices are given, the gross quasi rents, inclusive of the amount that is allocated to advertising and to purposes of the state, must be greater than the amount required by debt and asst validation. Thus "free" television and the benefits all receive from the CIA, the FBI and the military must show up in product prices in the form of a mark up on labor costs. The realized surplus must be large enough to sustain capital asset values as well as to finance government expenditures.[4]

Income and property taxes on business enterprises are also an allocation of the gross mark up on out of pocket costs. To the extent that the quasi rents necessary for the validation of corporate debts and to sustain asset values (share prices) are given, the gross mark up on out of pocket costs needed to yield the required quasi rents will vary with income and property taxes. In a world of reproducible assets and negatively sloped demand curves that are not fully exploited a rise in corporate income, property or value added taxes will not necessarily result in a decline

4. Note this argument implies that corporate income taxes must show up in the mark up on labor costs. It is also true that corporate income taxes and value added taxes are both part of the mark up. In the United States we have a peculiar tax in the form of an employer's "contribution" to social security which is best viewed as a partial value added tax. We also have a corporate income tax which requires that the gross mark up be greater than the mark up which would just validate the "bonds" issued to finance capital asset purchases and to validate the prices paid for capital assets. Therefor prices must reflect both the value added tax on labor and the corporate income tax. If we view price formation from the perspective of what prices have to be if the capital development of the economy is to be done well then both value added taxes and corporate profit taxes show up in product prices.

in net quasi rents applicable to debt validation and the sustaining of asset prices. Instead output prices and quantity produced will adjust to absorb some of the unexploited margin in the demand curve: the mark up per unit of output will increase.

Note that if the aim of policy is to sustain private investment, policy measures will have to offset any decline in asset values that threatens to slow down investment. This may take the form of

1) inflating the overall price level in order to generate sufficient nominal quasi-rents to validate nominal debts and thereby raise asset values relative to current prices

2) having the government run profit sustaining deficits

3) intruding specific tax breaks and subsidies into the governments budget, and

4) inventing new financing techniques.

The mark up on wage costs that is required to sustain the values of capital - assets used in production is related to the capital intensity of the production process. Thus for a capital intensive process the ratio of expected price to labor costs needs to be greater than for less capital intensive processes: similarly a highly indebted high interest rate economy requires a greater ration of product prices to out of pocket costs. The various industries and firms in existence at any time differ in the mark up on labor costs that is required to validate the prices they paid for the capital assets they use in production and their

liability structure. Those with the more capital intensive processes and the greater debt ratios require a larger mark up. If the aggregate investment ratio - or government employment or transfer payments for that matter - rises then aggregate profits increase. The distribution of these higher profits among the various productions depends upon the realized ratios of prices to labor costs among productions as well as the distribution of demand among products.

However if the relative prices of the capital - assets used in the various productions are to remain unchanged the relative profits which are capitalized cannot change. It is necessary for profits in the various outputs to rise in the same proportion for this to happen. But this implies the greater the capital intensity of output, the greater the rise in product prices that is needed to sustain relative asset values, unless the output of goods produced by capital intensive techniques increases disproportionately as aggregate profits increase. In order to sustain an increased ratio of investment (and Government and transfer payments) in the economy the prices of products produced by capital intensive techniques needs to rise relative to the prices of products which use less capital intensive techniques. But the pattern of demand curves that rule may make such required product prices unobtainable. (This is what may have happened to the 747 in its early days.) Furthermore the principle of substitution in demand will

operate to shift demand towards the outputs whose required price has increased less rapidly:i.e. those outputs that are produced by less capital intensive techniques. Thus in order to sustain a high investment economy various interventions designed to increase the cash flow or profits that are available to service debt and sustain asset values in capital intensive lines of production have to be intruded into the pricing system. Subsidies and taxes have to be biased in favor of capital intensive production techniques. Accelerated depreciation and investment tax credits are intruded into the fiscal system in order to induce capital intensive modes of production in the face of market developments that are unfavorable to such investments.

If we think of the gross surplus being sustained by investment and state expenditures and taxes as a way of dividing the gross surplus between profits and the government revenue, then a government deficit implies that a greater mass of profits is available for the business sector. A large state which, because of the nature of the tax and government spending system, runs a contracyclical deficit, both sustains the size of the gross surplus and assures that the business profits available to validate debt and determine asset prices do not fall at the same ratio as business investment. In fact by increasing transfer payments and government spending while reducing taxes government policy can assure that the mark up on labor costs not only does not fall but even increase during a recession.

Price behavior, during the 1973/75 recession, which may be an anomaly to one wearing neoclassical blinders, is quite consistent with the implications for prices of increased transfer payments, tax rebates and tax reductions.

Incidentally even as large government deficits imply that profits are sustained and even increased, chronic government surpluses cut the profit share in the value of output and thus lead to a decline in the price of capital assets. A Brookings study by Duesenberry, Bosworth and Carson which focuses on an alleged capital shortage prescribes a chronic government surplus as a remedy.[5] If the argument here is correct, a chronic government surplus depresses corporate cash flows: asset values will also plunge unless interest rates fall by enough so that the on the average smaller expected future cash flows will have a larger present value. But less can be more only for investments that have a long pay off period. A government surplus which is believed to be a long term phenomena will have a favorable effect upon long term assets relative to its effect upon short term assets. Only in a special case are the aggregate investment goals enunciated by Duesenberry, Bosworth and Carson consistent with the profit implications of the fiscal policy they favor.

Conclusion

5 B. Bosworth, J.S. Duesenberry and A.S. Carson: Capital Needs in The Seventies, Brookings Institution, Washington D.C. 1975, pp. 85).

Once the conditions that the ruling set of prices needs to satisfy are expanded to include the generation of cash flows from operations that

1) validate the inherited debt and equity structure of firms that own the capital assets of the economy

2).induce desired to increase the stock of capital assets and

3) draw forth financing for such expenditures,

the simple equilibrium and equilibrating story of neoclassical price theory loses its relevance. Furthermore the greater the cash flows needed to validate inherited debt the greater the capital intensity of production, and the greater the aggregate mark up on labor costs in the production of consumer goods that is required to ration consumer goods among diverse claimants the smaller the relevance of neo classical price theory and the claim that market capitalism is efficient. In a world of large scale capital asset intensive production, a major function of the pricing mechanism is to generate sufficiently large gross profits to keep the investing machine operating. Whereas the normal rationale for investment is the presumed increase in output that will be forthcoming in a modern capitalist economy the rationale for investment is increasingly that unless investment or its equivalent in government debt financed expenditures are sustained profits will not be high enough to validate the inherited debt structure and to sustain capital asset prices.

Once it is recognized that the pricing system has to generate a mass of gross profits in order to validate debts and sustain asset prices and once capital intensive multiple product production is take to be the norm, then a regime of private negatively sloped demand curves confronting the various capital intense production processes are necessary in order to attenuate the risk that market competition will force prices down to marginal costs. Forcing prices down to the labor costs is disastrous for normal functioning of the financial markets of a capitalist economy. That is strong, unregulated price competition in the markets of products produces by capital intensive processes is incompatible with the uncertainty attenuation required by financiers and bankers before they will hazard substantial funds in the financing of such processes. Given that such capital intensive production processes are confronted with negatively sloped demand curves in the various markets that are served, the prices of the output of the firm in the various markets need to be such that the mass of profits reach or exceed some target. However a firm in such a situation is quite indifferent as to how its gross profits are generated in the markets it serves; thus there are policy and political elements in the various prices.

There is of course a "monopolistic maximum" which, given the constraint imposed by the various demand curves, sets a ceiling to profits, if firms in fact maximize profits. A difficulty for normal functioning of a capital

using capitalistic economy arises when profit maximizing behavior does not, in general, generate sufficient cash for the servicing of debt and the sustaining of asset values. In these circumstances the only way debts can be serviced and asset values sustained is by measures that increase the mass of available profits: measures that end up pushing the demand curves of the economy to the right even as the out of pocket costs do not increase at a commensurate rate.

Short of profit maximizing behavior, price determination for the outputs of capital intensive multiple product production processes is a political matter, whether the politics are within the firm, between firms, between the firm and various regulatory agencies or between the firm and the various public bodies that intrude taxes and subsidies into the pricing process.

Thus prices are political in two senses. One is that the overall decision of whether to run a high or a low investment, transfer payment and state employment economy will affect relative prices. The second is in the details of the pricing regimes, where private and public taxes and subsidies generate the relative prices which determine the terms at which alternatives are available to households.

In the world in which we live economists cannot appeal to an impersonal set of Genetic preference systems and production possibility relations as determining output, prices and incomes. It is not enough to think in terms of full employment policy under the assumption that the details

of the full employment are technologically and preference system determined. Economists have to face up to the ideas that there are inevitable how what and for whom questions that policy has to confront. Instead of escaping responsibility by an appeal to a technological or genetic determinism, we have the freedom to choose the how, what and for whom dimensions of economic life.

It is important to note that the discussion of pricing in a capitalist economy has ignored production functions which are one cornerstone of neoclassical theory even as we accept that the distribution of demand changes among the various outputs depends upon preferences. However it is important to note that the actual preference systems in our economy are subject to manipulation by advertising and that many instances of market power due to advertising are evident. The importance of market power as a guarantor of financial flows and therefor as a factor reducing the perceived risk and improving financing availability and terms means that the optimality properties of the competitive equilibrium of neoclassical theory is at best a limited optimality.

Beginning economic theorizing from the perspective of a board room casts doubt on the validity of the neoclassical paradigm for microeconomics.