COOPOLIZATION AND INCOMES POLICY

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Prices in a market economy are set by bargaining between buyers and sellers. That bargaining is conducted within an institutional arrangement which differs from country to country. Equilibrium is determined both by the immediate relative power of buyers relative to sellers and the longer term relative powers of buyers and sellers reflected in institutional arrangements.

An incomes policy is a policy designed to change the relative bargaining power, so as to lead to a "preferable" bargaining solution. The bargaining power can be changed from the ground up, or from the top down. It can be changed by modifying existing institutions or by adding new institutions so as to change individuals' incentives to raise and lower prices. In order to advise a country on the type of incomes policy it needs, one must have full knowledge of its institutions; the evolution of those institutions; and the bargaining power of suppliers relative to that of demanders.

Countries such as Austria, which are relatively small with a highly centralized institutional structure and a homogenous population, probably can best use a top-down incomes policy: apply pressure on union and business leaders to decide on what constitutes a fair settlement. The leaders then pass the word down and pressure their constituencies to hold down their demands and convince them that the settlement is fair. Because labor is strong, the incomes policy works primarily in holding down wage demands with corresponding guarantees on business profits and government revenues. That tripartite bargaining is known by many as the only type of incomes policy.

Unfortunately, top-down incomes policy does not work well for less centralized institutional structures such as characterizes the U.S. Despite having continually talked back on incomes policies as aggregate policies have proven insufficient to meet desired goals, all postwar U.S. Presidents except Dwight Eisenhower and Ronald Reagan have instituted some type of formal incomes policy. Those include the World War II Controls (1942-45), the Korean Controls (1950-52), the Kennedy Price and Wage Guideposts (1960-66), Nixon's New Economic Policy (1971-74) and Carter's Council on Wage and Price Stabi-

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abandonment of incomes policies. That friction usually culminates in labor, which has consistently supported an incomes policy as long as they believe it is equitably administered, rezoning its support, claiming that the policy in question is inequitably administered.

The failure of past U.S. incomes policies has led many to disparage their use, and in the 1962-65 period the U.S. has followed a de facto incomes policy which relies on a tight monetary policy regime exerting downward pressure on prices. After an initial period of high unemployment, this policy has been relatively successful in stopping inflation, in part because of change in the political climate (in the 1960s, 7 percent unemployment was regarded as a recession; in the 1980s, it is seen as natural); in part because it has been accompanied by a strong dollar; in part because of a disinflation, owing to slack employment, of labor unions’ power; and in part because of falling commodity prices. The first two keep strong competitive pressure on prices while the latter two allow that downward pressure to be translated into lower wages, so that the political-economic equilibrium is maintained, albeit with large budget deficits. These fortuitous circumstances cannot continue indefinitely, and inflation remains a likely prospect for the latter quarter of the 1980s. When it arrives, the U.S. will once again address the question of a formal incomes policy.

Given this past history, it seems unlikely that a top-down incomes policy will work for the U.S.; the very size of the U.S. economy creates so many interest groups that even deciding who should agree is fruitless. What works in Austria, population 7.5 million, will not work in the U.S., population 220 million. With the weakening of labor unions, a policy of pressure imposed from above and relying on agreement of a tripartite board is less feasible than previously. However, for a bottom-up incomes policy, relying on competitive pressure on labor, the weakening of labor unions is a positive development. The very forces that make the top-down policy impossible make the bottom-up policy feasible.

The bottom-up policy relies on institutional incentives placed on lower-level decision makers who, through their choices on prices and quantities, transmit the downward pressure on prices upward to the aggregate. No tripartite decision is necessary. This bottom-up incomes policy is exemplified by the market anti-inflation plan (MAP) and TIF (tax-based incomes policies), which are detailed by Lerner and Colander [3] and Colander [1]. They not only provide a new approach to administrating an incomes policy; MAP and TIF also provide a new way to think about how an incomes policy works realistically and what its goals are. To begin with, by focusing the analysis on a model similar to the neoclassical model, it allows us to avoid the necessarily messy debate about political economy (the role of labor, business and government) and concentrate on the question of how an incomes policy relates to mainstream theory and under what circumstances an incomes policy may be “helpful.” In doing so, the analysis also provides some insight into inflation and the inflationary process.

I. The Theory of Incomes Policies

My theoretical argument is a simple one. Incomes policies are not anti-competitive; they are pro-competitive. They provide synthetic competition and in theory make our economy more efficient. Incomes policies are designed to squeeze out monopoly. This is not the way the role of incomes policies has been hitherto seen, because top-down incomes policies do not lead one to think in those terms. Bottom-up incomes policies do.

do. The intuition behind the argument is the following: at any point in time, there is a certain amount of real production and a certain number of real claims of suppliers; when there are claims in excess of production, tendencies toward inflation exist. The speed with which these are translated into inflation depends on the institutional structure.

In a unit-of-account economy claims generally are specified nominally, making nominal prices important. A unit-of-account economy allows some elasticity in claims, so that even if actual claims do not equal production, ex post claims do. This occurs because the price level diverges from that expected, changing the relative claims. Such price level flexibility is useful. However, if there is a consistent tendency for claims to exceed production, institutions will be modified so that claims are no longer specified in nominal terms, but in real terms. As this happens the fluctuation in the price level needed to achieve the same elasticity increases as people start building expectations of a rising price level into their demands. At that point a society has a chronic inflation problem.

From historical experience, it seems that these institutions change slowly and thus the long-run causes of inflation and the actual inflation can diverge. In order for an economist to understand that theory of incomes policies it is helpful to avoid many of the institutional issues and consider a set of institutions most closely associated with the mainstream models and which still capture the effect institutions have on the inflation process. I call this set of institutions the almost competitive economy [2]. The almost competitive economy is similar to the competitive economy of mainstream economics, except that it allows for co-opolization—the organization of suppliers or demanders into formal or informal groups, monopolies, cartels, or coalitions to increase the economic rent flowing to them. (This approach relates closely to Mancur Olson’s [6] analysis of the economies.)

Given the nature of production and consumption technology of Western societies, there is a systematic deviation from competitive market structures, with a bias towards sellers’ monopolies. The reason is that the production takes place on a more cooperative basis than consumption, and the number and variety of goods we consume is far less than the number of goods we produce. Because of this, the costs of sellers forming monopolies are less than the cost of demanders. Put simply, it is cheaper for sellers than for demanders to coopolize. Labor, entrepreneurs, and capitalists enter into supplier of production coopolies and thus the sources of income are far fewer than the number of goods and services upon which that income is spent.

The "coopolies" that result are not monopolies in the strict neoclassical sense but are coalition equilibria. The resulting equilibria are reflected in the collective monoplies described in Adam Smith and other classical writers which involved a simultaneous building up and breaking down of monopoly.

I have developed a simple model [3] that captures the coalitional equilibrium I have in mind and I present a simple exposition below. For simplicity it assumes that demanders form no coalitions. Suppliers maximize profit subject to demand conditions, production constraints, and "coopolization" constraints. The latter consist of the expenditures the supplier or group of suppliers incur to insure that no other potential suppliers enter the open market to supply the excess capacity that coopolization or cartelization causes. The key variables in the analysis are the costs and benefits of coopolization. To keep the exposition as simple as possible, I assume the costs of coopolization begin at two and increase at an accelerating rate. The marginal cost curve of coopolization appears in Figure 1.

The marginal benefit from coopolization is the gain from reducing output to the remaining coalition. Thus it is the marginal cost of production minus the marginal revenue plus the gain to the coalition of having to divide the rent among fewer suppliers. A marginal benefit curve also appears in Figure 1 and is combined with the marginal cost of
monopolization assumed above. The quantity reduction is measured on the horizontal axis, and the marginal cost of that reduction is measured on the vertical axis. The monopolist's profit maximizing quantity reduction is seen to be $\Delta Q^*$ in which $\Delta Q^* = Q_c - Q_0^*$. Thus, production will be lower than the competitive level. What does the analysis mean for the traditional model? We can determine what it means by combining the above analysis with that traditional model. I do this in Figure 2.

In the standard monopolist model, the monopolist has an incentive to reduce output as long as the marginal revenue (which can be interpreted as the marginal cost to reducing output) is below the marginal cost of production (which can be interpreted as the marginal gain to reducing output). For a coop, the same analysis holds except that the coopoly must make two changes. First, it must add to the benefits of reducing output the gain it receives from excluding some individuals (reducing the size of the group among whom the rent must be divided). Second, it must subtract the cost of coopolization. This is done in Figure 2 and the result is what I call the net marginal revenue (NMR) curve; this curve determines the net benefit to the coopoly of reducing output. Since the unit cost of coopolization increases with the amount of coopolization, the NMR is a curve rather than linear. Equilibrium is determined at point $a$ where the NMR curve intersects the marginal cost of production. Since the net benefit curve exclusive of costs is a line parallel to the demand curve (line $bc$) and the net costs are positive output could be at any level between zero and the competitive output. If the increase in rent had to be spread among all producers, then the marginal cost of exclusion would need to be added to the usual marginal revenue curve and output would be higher and price lower than the traditional monopoly model.

II. How a Bottom-up Policy Works

The above model is a useful one; it incorporates an institutional reality in our system and hence provides an outcome more consistent with our economy than does the competitive or monopolistic model. It also provides a way of demonstrating how a bottom-up incomes policy would work.

Within the above model an incomes policy operates by increasing the cost of monopolization to sellers. The tax and market based incomes policies best demonstrate this effect. Under a TIP whenever a seller raises his price, he must pay a tax; whenever he lowers his price he receives a subsidy. The TIP tax shifts the "cost of monopolization" curve up, as in Figure 3. This reduces the relative price of the good and increases the output. It is this model which justifies my initial statement that an incomes policy is designed to squeeze out monopolies and that incomes policies are not anti-competitive. They attempt to make the economy more, not less, competitive by making supplier coopolization more costly.

III. Interpreting the Equilibrium

The above is a partial equilibrium diagram but it has relevance to the general dynamic...
Specifically, for the demand curve derived under these assumptions, the only relative price that can change is that between market and non-market activities and the only place for displaced suppliers to escape to are in non-market activities. Whereas in the traditional monopoly story, excluded individuals are assumed to enter another monopoly, the only activity excluded suppliers are left with in this model is the activity of trying to break into one of the market monopolies. The resources devoted to breaking into that monopoly would be considered "unemployed" in the Keynesian sense. Labor would like to work at the existing wage and entrepreneurs would like to produce, but they cannot because of barriers to entry. It follows that they are searching and waiting longer than is socially optimal. Their continued search is, however, necessary to maintain the equilibrium; they form a type of steady-state reserve army of unemployed resources whose function to society is to prevent inflation from accelerating. An incomes policy reduces the price differential between market and non-market activities, where non-market activities is simply an activity that does not enter into the price index, by making monopolization more expensive, thereby increasing the equilibrium output by decreasing the market price relative to the price of non-market activities.

The "model" is not a trade-off model—if unemployment is reduced below the "equilibrium level," accelerating inflation begins, and it cannot be maintained in steady-state equilibrium. Thus it is a model of the non-accelerating inflation rate of unemployment as contrasted with the natural rate (Colander [2]).

IV. The Relevant Relative Price

A couple of points need to be made about my model. It specifically does not separate the labor and product market. In my view that distinction confuses many of the relevant issues by leading one to speak of the real wage. In a dynamic equilibrium model, searching and working activities are allowed and have a shadow price. Thus, in any dynamic equilibrium model, there are at least three markets and two relative prices—the wage-price ratio and the market wage-non-market wage rate—that can be in disequilibrium. When one speaks of the real wage, it is unclear which of these is meant. In my model, I assume labor and entrepreneurs (both self-employed) are part of a coalition. I therefore focus on the market-non-market relative price. This removes enormous confusion. (This can, of course, complement the model with additional labor market-product market disequilibrium stories, but the success of an incomes policy does not depend on lowering market/non-market relative price as the "real" wage.) It also allows one to focus on value added per unit of composite input as the theoretically correct central variable.

A second point is that the model has abstracted from many real world institutions to whatever degree possible. This allows one to see the pure nature of the "incomes policy" problem and to incorporate such policies into the traditional neoclassical model. Before the workings of an actual incomes policy can be determined those real institutions must be considered. But doing so does not change the argument that any effective incomes policy works by increasing the cost of sellers' monopolization.

As I stated at the beginning of this article, in European countries, because of the size of decision-making groups, the coalitional equilibrium can often be optimally effected by imposition of an incomes policy from above, letting the anti-monopolization incentive filter down to individuals. In the U.S., in my view, the incentive can be better instituted at a

3. See, however, Colander and Olsen, [4], where we explain why a temporary trade-off might recede.
4. Value added is simply a measure of real output divided by real inputs.
lower level, letting it filter up. That is why a TIF type plan is much more relevant to the U.S.

V. Conclusion

There is, of course, much more to be said about the theory of incomes policies. However, the novelty of this approach has, I hope, stimulated interest in thinking about incomes policies and in how institutional changes combined with aggregate demand policy can be effective in reducing the level of unemployment.

References


SWITCHING AND EMPLOYMENT

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I. The Context

The debate over the neoclassical theory of capital has provided an extensive array of models where the economy is divided between capital and consumption goods. The analytical framework for the discussion of the static factor-price frontier is therefore the same as that used to identify the dynamic properties of fixed coefficients two-sector growth models. This has been shown clearly in a recent book by Mukherji [7]. In this article I shall discuss the implications of this analytical structure for the employment capacity of such systems. I conclude that Pasioura's contribution constitutes a way out of the special case character of the results yielded by such models [8]. In a two-sector model, the relation between the wage rate and the rate of profit (w/r) is derived from the following pair of price equations:

\[ p = p_{1} + w_{1} \]
\[ 1 = p_{2} + w_{2} \]

where:

\[ p = \text{unit price of capital goods} \]
\[ 1 = \text{unit price of consumption goods taken as numéraire} \]
\[ a_{1} = \text{amount of capital goods per unit of capital goods output} \]
\[ a_{2} = \text{amount of capital goods per unit of consumption goods output} \]
\[ b_{1} = \text{amount of labor per unit of capital goods output} \]
\[ b_{2} = \text{amount of labor per unit of consumption goods output} \]
\[ r = \text{rate of profit} \]
\[ w = \text{wage rate} \]

The shape of the w/r relation is given by the value of the determinant of the coefficients matrix sustaining the price system (1). That is:

\[ (a_{1}b_{2} - a_{2}b_{1}) \leq 0 \]  

(2)

If the value of (2) is less than zero, then the w/r relation will be given by a curve convex toward the origin; a positive determinant will imply a concave curve and a zero determinant will generate a straight line. The three cases are illustrated in Figures 1, 2, 3.

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