

Poverty (1965)

POVERTY: THE "AGGREGATE DEMAND" SOLUTION
AND OTHER NON-WELFARE APPROACHES

by

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I. Introduction

Mark Twain's remark to the effect that everyone talks about the weather but no one does anything about it seems a fitting introduction to a discussion of the part that an adequate aggregate demand can play in the war on poverty. Everyone pays lip service to an adequate aggregate demand as a necessary condition for a successful war on poverty. However, they do not spell out the size of an adequate aggregate demand, the barriers to achieving it, the efficacy of the available weapons, and the possible side effects that would accompany such an adequate aggregate demand.

The major task of this paper is to examine the meaning of the phrase 'an adequate aggregate demand' in the light of the commitment to war on poverty. As the adequacy of any level of aggregate demand depends upon the ruling policy objectives or goals, the problem before us is transformed into an evaluation of the weight to be attached to the various standard policy goals in the light of the introduction of the elimination of poverty into the list of policy objectives.

A secondary task is to outline a program against poverty in the light of the new weights to the other policy objectives.

However, I cannot neglect the gambit introduced into the discussion by the assigned title. The aggregate demand solution is defined as a non-welfare approach. Thus, before I take up some of the problems associated with attacking poverty by way

of aggregate demand I will examine some of the implications of the war on poverty for welfare economics.

II. "Traditional" Welfare Economics and the War on Poverty

The war on poverty touches upon traditional welfare economics [Bator 3] in a number of interesting ways. We can use the war on poverty to indicate the relevance of various ideas in welfare economics to the real world: or at least the world in which political decisions are imposed upon economic relations. This is especially true as the war on poverty seems to be very popular indeed. Thus the evaluation of social goals and the trade-offs among goals that are quite explicit in this war can be considered to reflect the preference system of society as a whole.

First of all, if an increase in aggregate demand results in a rise in aggregate supply and if there are no perverse distribution effects then, under standard assumptions, economic welfare will increase.

As is true of all political decisions with respect to economic variables, the war on poverty is an exercise in 'the second best' [Lipsey and Lancaster 6]. That is, additional constraints are imposed upon an already highly constrained world. The argument is that this makes some or all better off than they were in the initial situation. The existence of other alternatives, which would involve either wholesale or

piecemeal dismemberment of existing constraints, is not relevant to the political decisions. The only practical way to remove an inherited constraint seems to be to render it redundant, i.e. to impose additional 'dominant' or 'interior' constraints that in fact render a preexistent constraint inoperative.

Thus for example a prerequisite for the liquidation of a price support program in agriculture may be the guarantee that jobs exist at adequate incomes outside of agriculture. For in these circumstances the support of incomes by way of agricultural price support decreases in importance.

Note that the general theory of the second-best implies a strategy for economic reform. Economic reform takes place by means of a piecemeal modification of an existing set of constraints. An ideal reform measure, given the existing set of constraints, should improve the welfare of at least some units and, by dominating a constraint that generates some allocative or distributional inefficiency, make possible a quite general increase in output and thereby welfare.

As will be noted below many of the constraints can be interpreted as techniques that improve welfare by modifying some market uncertainties. Hence a policy approach that modifies or diminishes uncertainty for all is in general superior to a set of constraints that modifies or diminishes uncertainty for a particular sector.

The sensitivity with regard to institutional arrangements exhibited in real life social change--in contrast to the cavalier

attitude toward changing institutional arrangements of the academic's exercise [Friedman 4] is due to a phenomenon which thanks to Galbraith [5] and Arrow [2] economists are beginning to incorporate into their mode of thinking. Institutional arrangements and conventions, from the Hypocratic oath of the doctors to the concern with job security of the trade unionists and professors, exist in order to put bounds on uncertainties which cannot in fact be subject to insurance. The world as constituted will willingly give up real income (i.e. economic efficiency narrowly defined) in order to substitute a less for a more uncertain situation. Systems of thought which ignore uncertainty throw little or no light on the reasons for various market institutions and behavior patterns. Thus the standard welfare maximization of economic theory misinterprets the welfare that is in fact maximized.

The war on poverty, if it is successful, will lead to a higher floor to individual or family income than now exists. If this floor is sufficiently high then various devices designed to protect special groups or sectors against income uncertainty will become less important. Thus a successful war against poverty will make it possible to eliminate various special protective programs that are inefficient in the statistical certainty context within which they are usually evaluated. Just as once income rises to a sufficiently high level, heavily loaded insurance becomes an income elastic commodity, so once social measures are taken to diminish the effects of uncertainty

those public and private measures designed to protect against special types of uncertainty become less valuable.

In the light of the above the war on poverty (or at least the Great Society which is its objective) should be expanded to afford protection against impoverishment. In order to remove or diminish the opposition and the private losses attached to technological change, schemes which compensate these immediately imparted will be of value. With such schemes any decline in particular incomes due to technological or institutional changes will at least in part receive compensation. That is, as the promotion of technical dynamism is public policy, the public, through the government should absorb some of the risks to the human capital of workers that is due to technical dynamism.

Modern welfare economics assumes that interpersonal comparisons of utility or welfare are not valid and hence that no distinction can be made among different distributions of a net gain in real income. The poverty program in its most fundamental sense is concerned about income distribution. As the poverty program exists within the context of a growing economy it is not a 'share the wealth' program, it is a 'share the growth' program.

If for example per capita GNP grows by some 3 percent per year then the widespread acceptance of the poverty program implies that the world's preferences are such that the world is better off if low incomes rise by say 5 percent while high incomes rise by say 2 1/2 percent per year than if all incomes

rise by say 3 percent per year. In fact a rise in GNP which is accompanied by "the rich getting richer and the poor getting poorer" can, by the welfare function for economy implicit in the universal acceptance of the poverty program make the world worse off.

A program prescription seems to follow. If it is settled policy for low incomes to grow faster than high incomes, until some target ratio of minimal to medial incomes is reached, then a rate of increase of the minimum wage that is greater than the rate of increase of the median wage is desirable. The existing policy that has the minimum wage jump by fairly large increments every once in a while should be replaced by a program in which the minimum wage increases by say some 5 percent per year while other income payments are constrained to a 3 percent increase.

To summarize two threads in recent welfare economics seems to be especially relevant in the light of the widespread acceptance of the war on poverty. One is that policies need always be evaluated in terms of an existing set of institutional and program constraints rather than in terms of some ideal situation. The other is that in a world with uncertainty, many aspects of the economy that seem to be barriers to efficiency really increase real income in the subjective sense by decreasing uncertainty. A scheme that limits the losses that are allowable may be a necessary first step to eliminate barriers to narrowly defined efficiency.

The poverty program once again indicates that the world is deeply concerned about income distribution. The economists' "Paretian" self-denying ordinance which does not permit any ranking of different income distributions means that economists as a trade are not addressing themselves to a question the clients want answered. Can ways of estimating the benefits and costs that will accrue to society from different ways of slicing the income pie be derived? In a world where systems analysts rank many complex multidimensional phenomena, a statement of the pluses and minuses from different income distributions seems within the state of the arts.

Economists seem to prefer programs that distribute money income to those that distribute income in kind. Political solutions more often than not lead to income in kind: education, Medicare, housing subsidies, etc. Is this political preference due to a lingering belief in the undeserving poor; that idiots, children, and the poor are not capable of making rational choices? Or is it a valid reflection of a community view that externalities associated with a free choice which permits some to fall, of their own free will, below a minimum are so great that it is better to sacrifice efficiency for safety? The economists' efficiency-oriented policy prescriptions based upon the analysis of the world under certainty have upon deeper analysis turned out to be so wrong that professional diffidence is necessary in evaluating the practical man's preference for programs that provide income in kind.

III. The Adequacy of Aggregate Demand

A. Introduction

The adequacy of aggregate demand can be judged only in the light of the targets or goals set for the economy. Prior to the war on poverty the standard list of economic policy goals included full employment, economic growth, domestic price stability and the international stability of the dollar. The war on poverty introduces another goal which can be phrased as the establishment of a floor to family real income that is substantially higher than the existing floor. Inasmuch as we do not live in a Pollyanna world where all desired good ends are available with no cost but in a hard world where trade-offs among goals exist, the weight to be attached to the other older goals in determining economic policy needs to be reconsidered in the light of the new objective.

Of course, the change in the weight to be attached to these traditional goals depends upon how seriously the war on poverty is to be taken. For purposes of this paper I will assume that the war on poverty is serious.

B. Full Employment

In the light of the campaign against poverty the importance of full employment as a goal increases. This is especially true for the United States. The American economy has been operating with considerable slack for the past decade and the income gap between actual and potential income in 1965 is much more

than would be needed to move all those now living in poverty to incomes well above the current poverty line. In addition full employment as an objective is enhanced in the light of the war on poverty to the extent that the war on poverty has social as well as economic targets. The social value of jobs may be greater than the value of the output produced; employment may have social external benefits. That is, it may be better to eliminate poverty by means of income from jobs than to eliminate poverty by transfer payments.

The precise definition of the full employment objective is an open question. Definitions in terms of wage-price and unemployment relation are popular. These aggregate 'Phillips curve' definitions are part of the reason for our acceptance of the slack labor market conditions that exist. A perhaps more useful definition of full employment for the purposes of a war on poverty is that full employment exists when over a broad spectrum of occupations and a large proportion of the geographical regions more jobs are open at a going wage than the number of unemployed workers. This disaggregated view of unemployment will allow for an inconsistency between employment goals and price level goals whereas the Phillips curve approach seems to beguile policy makers and analysts into cutting the employment goal to fit the price level stability cloth.

A more convenient way to define full employment is in terms of a target measured unemployment rate accepting a particular measurement technique as generating, if not a good count, at least

a good index. Using the United States measuring technique the Council of Economic Advisors has taken as an "interim" goal a 4 percent unemployment rate. In the light of European postwar experience and United States wartime experience this is a very slack definition of full employment. A very generous estimate of the measured unemployment rate in the United States that would be equivalent to recent European rates is 2 percent. A slack definition in terms of numbers of the desired tight full employment for the United States would allow for a 2 1/2 percent measured unemployment rate. From the point of view of the poverty program the achievement of such an unemployment rate should be an urgent policy objective.

In the Spring of 1965 the measured unemployment rate in the United States has hovered in the neighborhood of 5 percent. Using Okun's law [Okun 9] which states that for each 1 percent point decrease in unemployment there will be approximately a 3 percent increase in GNP, a decrease of measured unemployment from a 5 percent to a 2 1/2 percent rate will be accompanied by a rise of some 7 1/2 percent in GNP. (Okun's law may only 'operate' down to a 4 percent unemployment rate: if this is true then the GNP rise with such a decrease in unemployment may be only 4 1/2 percent of the expected 1965 GNP). As the forecast GNP for 1965 is approximately \$660 billions, this leads us to a tight full employment GNP in the neighborhood of \$700 billion for 1965. As the gap between actual and poverty line incomes can be filled by a judicious distribution of some \$11 to \$12 billions to families now living in poverty [Anderson 1], the resources to

eliminate poverty exist in the unproduced income that accompanies the slack in the labor market.

To what extent will the additional income associated with tight full employment actually accrue to the poor?

If we classify the poor by the labor market status of the head of the family we find that approximately 30 percent are employed throughout the year, 30 percent are in the labor force and employed part of the year and 40 percent are not in the labor force [Economic Report of the President, 1965]. This means that a movement to tight full employment will directly benefit at least the 60 percent of the families in poverty whose head was in the labor force.

Tight full employment will benefit the other 40 percent of the families living in poverty in the following ways:

(1) Labor market participation rates are down for males; tight full employment will draw some heads of families not now in the labor market into the labor market.

(2) State and local governments finance many welfare services; tight full employment will increase state and local tax receipts.

(3) By easing the burden of supporting poor families whose heads are in the labor force, both financial and real resources are freed to aid the poor who really must depend upon public support.

However, for many of the poor families whose head is not in the labor force, the only path out of poverty is by way of a

greatly improved and enlarged system of welfare services and income in kind.

Tight full employment will directly benefit some 60 percent of the families now living in poverty. The most obvious beneficiaries are those whose poverty is due to unemployment. In addition tight full employment will:

(1) draw additional members of these poor families into the labor force; (multiple earners in one family is an important way in which families are lifted to incomes well above the poverty line);

(2) tend to raise lower wages relative to higher wages; (the pattern of relative wages is due in part to past labor market conditions) [Ulman 12];

(3) expedite the movement of rural poor to the cities where income opportunities are better;

(4) by making all labor something of value, aid the removal of discriminatory barriers to employment.

Labor is not perfectly homogeneous and fluid. An increase of GNP to \$700 billions may only lead to a rise in the wages of the already employed and the prices of whatever it is they produce. The heterogeneity of the labor force imposes a "what kind" dimension upon the demand for labor and therefore a "what kind" dimension is imposed upon aggregate demand. All we can assert is that a properly distributed aggregate demand of \$700 billions and its associated incremental demand for labor will not only increase welfare by raising income but will yield

a social benefit in diminishing poverty. Perhaps a better statement of the effect of tight full employment is that it will accelerate the rate at which poverty is being reduced.

That is, tight full employment (a 2 1/2 percent maximum unemployment rate and a GNP of \$700 billions in 1965) will do a good part of the job of eliminating poverty, but is tight full employment attainable?

C. Economic Growth

The significance of accelerated economic growth as an objective of economic policy is diminished by the introduction of the elimination of poverty as a policy goal. Ignoring the very real question as to whether economic growth ever should have been a policy goal for the United States, it is true that almost every measure that has been suggested to increase the rate of growth tends to affect income distributions perversely: to benefit the well-to-do at the expense of low income families.

This is not to deny either that economic growth will take place or that it is desirable. Given savings rates at full employment and the technical dynamism of the American economy, it may very well be that the realized growth rate will be higher at tight full employment without any growth stimulating measures than at a slack employment situation with special growth stimulating measures.

Tight full employment has an important growth-stimulating attribute. One of the major determinants of an economy's capacity

to produce is the skills, experience and attitude of its labor force. A young man of twenty who has had four years of job experience is a much more productive person than a young man of twenty who has spent four years on the street.

Tight full employment means that the valuable education of the shop is available to replace the often custodial time-serving that passes for high school education for those who are not oriented toward college. This on-the-job education increases productive capacity. It has not been a strong source of economic growth since unemployment rates increased after 1953. The introduction and continuation of tight full employment will augment the growth-inducing factor, quality of the labor force.

It has been argued [Anderson 1] that accelerated economic growth will not help much in eliminating existing poverty. The argument depends upon the fact that a large portion of the poor are in a long attenuated lower tail of the income distribution and a rise in average income, shifting the entire distribution upward, will not appreciably decrease the proportion of the total labor force in this tail. However, there is a difference between the impact upon income distribution of economic growth with an unchanging extent of labor market slack and a move from a slack to a tight labor market. The movement from a slack to a tight labor market truncates the lower end of the income distribution. Even though the move from relative slack to relative tightness can be read as an acceleration of the growth rate, it is not. It is a once-and-for-all displacement rather than a change in the steady state of the economy.

Thus the movement from a slack to a tight labor market is more important in eliminating poverty than an acceleration of the rate of growth. From the point of view of the war on poverty, accelerated economic growth can very well be abandoned as a goal of policy.

D. Domestic Price Stability

Domestic price stability is a most peculiar policy goal as its costs may be high and benefits nebulous. Nevertheless the fear of inflation, independently of its effects upon the balance of payments, is a determinant of economic policy. The interim target unemployment rate of 4 percent was set in the belief that for unemployment rates above 4 percent a decrease in unemployment is not associated with any significant increase in wages and prices and with unemployment rates below 4 percent any attempt to decrease unemployment will be associated with large increases in wages and prices. This Phillips curve [Phillips 11, Lipsey 7, 8, Perry 10] assertion is not an empirical relationship whose validity is without question: the existence and stability of the curve as well as its position are subject to considerable controversy.

This is not the place to enter into a lengthy analysis of the Phillips curve. However, the question arises whether the observed empirical relation is the result of intermittent tight labor markets in a world characterized by long periods of labor market slack and whether the empirical relation would be quite the same in a world where labor markets are chronically tight.

The transition from slack to tight labor markets will be accompanied by wage pressure on prices. Relative wages are in good part a result of the past history of labor markets. Periods of chronic slack are associated with an 'upgrading' of standards for particular jobs and a tendency for the wages of organized workers in prosperous industries to rise relative to the wages of both organized workers in depressed industries and unorganized workers. Periods of extreme tightness in the labor market are characterized by labor shifting from low paid to higher paid occupations and a supply-induced rapid rise in low wages.

Given the nature of American decentralized collective bargaining, the transition to tight labor markets will be accompanied by high wages rising at least as rapidly as productivity and low wages rising even faster. As a result costs of commodities and services produced by low wage workers will rise relative to costs of those produced by high wage workers. A pressure on the prices of products of low wage industries will arise. This will show up in the measured price level. That is, the transition from slack to tight labor markets will more than likely be accompanied by some inflation.

Although the \$40 billions or so of slack in the American economy is far greater than the value of the efficiency that would be lost due to even a 4 percent per year rise in prices, nevertheless the possibility exists that an unemployment rate deemed desirable from the view of the war on poverty may be incompatible with the largest rate of increase in prices that is politically

"tolerable." In this case one or the other (or both) objectives will have to be compromised unless there are policy measures which can shift the unemployment, wage-rate and price increase relationship.

Among the policy instruments which will affect the position of the Phillips curve are job training, relocation stipends, information improving devices, etc. However, perhaps more important would be the development of an income policy which could take the form of institutionalizing the formation of the guidelines and developing techniques by which the guidelines become the effective determinants of wage and profit changes.

Of course, during the period in which the wage spread is inconsistent with the war on poverty, the guidelines should prepare faster rates of increase for low wages than for high wages.

E. International Stability of the Dollar

A simplified description of the world's monetary system up until a short time ago could have been that the dollar was on a gold standard and the rest of the world was on a dollar standard. Over the postwar period a large volume of foreign short-term dollar holdings were generated--the United States was borrowing short. This short-term borrowing has been interpreted as a chronic deficit in the balance of payments.

As a result of the commitment to keeping the dollar price of gold fixed, the United States needs (1) to induce foreign-held short-term balances to stay in the United States and (2) to

constrain the deficit on current account. Foreign short-term balances are retained in New York by means of relatively high short-term interest rates. The deficit on current account is constrained by keeping income low relative to capacity and by restraining price increases through slack economy.

The dominant role of the balance of payments objective is obvious once the balance of payments implications of a high and full employment GNP of \$700 billions in 1965 are examined. A \$700 billions GNP not only will induce some \$1 1/2 billion of additional imports due to the rise in income but the accompanying price increases will generate some substitution of foreign for U.S. goods throughout the world.

Whatever the benefit that accrues to the United States from the key position of the dollar in the world's monetary system may be, it does not by any obvious connection improve the lot of the poor. Thus the significance of the international stability of the dollar as a policy goal is diminished by the introduction of the elimination of poverty as a serious goal. It is suggested that the international stability of the dollar be abandoned as a policy goal.

F. Conclusions

Given that the effort to eliminate poverty is serious, ~~then~~ the stature of full employment among the standard set of economic policy objectives is enhanced. As the effort to eliminate poverty is not simply a redistribution of a given income,

but a program designed to affect the distribution of increment of income, then the conflict between tight full employment and the international stability of the dollar implies that international stability is downgraded as a policy objective.

The question of whether economic growth is a significant independent policy objective transcends the introduction of the elimination of poverty as a policy objective. However, to the extent that the distributional aspects of growth-inducing programs are inconsistent with the incremental distributional requirements of the anti-poverty program, economic growth as an objective related to these instruments loses at least some of its importance.

Domestic price stability is in practice not consistent with the tight full employment whose importance is augmented by the war on poverty. Inasmuch as inflation remains a political hobgoblin, although the economic costs of mild inflation are not imposing, an employment program designed to eliminate poverty must attempt to minimize the extent of the inflation that accompanies tight full employment.

IV. A Program Against Poverty

In this section I will assume that tight full employment is essential for the rapid elimination of poverty. The policy problem is how to achieve and sustain tight full employment. The instruments are monetary and fiscal policy; however, we

recognize that each of these weapons has "what kind" as well as "how much" dimensions. Even though the effective barrier to tight full employment in the United States in 1965 is the commitment to the existing international value of the dollar, I will assume this barrier away. This is done so that we can focus on the barriers to achieving tight full employment which are due to the political weight attached to domestic price level stability.

As was mentioned earlier the presumed relationship between the rate of change of wages and prices on the one hand and labor market tightness on the other is encompassed in the Phillips curve. Even though grave doubts about the significance of the empirical Phillips curve exist, we can distinguish two different sets of reasons for the existence 'in principal' of such a relationship. One is that the curve encompasses the behavior of labor market institutions, the other that it reflects the intrinsic heterogeneity of labor supply and demand.

Two labor market phenomena that generate inflationary pressure as unemployment decreases are:

- (1) the effect upon the ratio of low to high wages of the movement slack to tight labor markets, and
- (2) trade union pressure for higher wages during tight labor markets.

The first reason for inflationary pressure--the effect of the transition to tight full employment--seems unavoidable and in addition is entirely consistent with the objective of

eliminating poverty. Those strongly committed to eliminating poverty must be prepared to ride out the objections to tight full employment during this transitional inflationary period.

Incidentally the repeated emphasis, by the Council of Economic Advisors, that inflationary pressures will increase whenever unemployment is reduced sufficiently so that it approaches their 4 percent interim target, is in the nature of a self-fulfilling prophesy. As a result the inflationary storm that will have to be withstood on the way to tight labor markets will be more severe than it would have been in the absence of any such target. The Council has in effect raised the barrier that must be scaled if poverty is to be eliminated.

The second labor market reason for inflationary pressures, the persistence of aggressive wage policies by trade unions after tight full employment has been achieved and sustained, can be dealt with only by an incomes policy which integrates the wage-price guidelines and tax policy. The function of an incomes policy is basically to achieve a consensus which dominates individual market positions. The transformation of wage-price guidelines into a consensus view of what the outcome of collective bargaining should be requires that the guidelines themselves should be the result of a bargaining process. Hence the transformation of the guidelines into the result of a tripartite bargaining process seems necessary.

An incomes policy must deal with non-wage as well as wage incomes. Guidelines for dividend and retained earnings

growth for giant corporations may be laid down--and tax policies may be necessary which are punitive with respect to the growth of gross corporate income faster than some guidelines.

The intrinsic heterogeneity of labor demand and supply is a technological or production function reason for the existence of wage-price pressure as unemployment is decreased. Not all workers are fit to handle all jobs and not all mixes of final demand generate the same mix of labor demands. As unemployment decreases the markets for different types and locations of workers pan from excess supply to excess demand at different overall unemployment rates. As a local labor market passes to excess demand for its particular type of labor, wage and thus cost pressures arise. Such locally tight labor markets can occur even in periods of considerable overall labor market slack. As the aggregate unemployment rate decreases, the weight of a locally tight labor market in the overall determination of costs rises.

Given that an adequate aggregate demand for purposes of eliminating poverty is \$700 billions in 1965, it nevertheless is possible that if demand is increased toward this target the major impact will be to bid up the wages of employed workers. If the effect of the increase in final demand is to increase the demand for labor already in excess demand, then the major impact of raising demand will be to increase wages and prices and not output. The unemployed and those who receive low incomes from jobs will not benefit.

There are three possible ways to adjust to the fact of heterogeneity in labor supply and demand: (1) adjust labor supply, (2) modify production techniques, and (3) modify final demand.

The programs of job training, supplementary education, regional development, relocation allowances, etc. are designed to modify labor supply. They presumably will shift the Phillips curve so that a lower unemployment rate is associated with a given rate of increase in wages and prices. However, to the extent that shifting the Phillips curve involves education, the gestation period for results from such programs is very long. To increase the supply of economists by means of operation "head start" has a very long lead time indeed. The path by way of a transformation of the present poor to suitable inputs for sophisticated production functions writes off too many present poor as hopeless cases.

The modification of production techniques to conform to the supply of labor reflects widening differentials between the wages of different types of labor. Increases in aggregate demand increase the demand for skilled workers and those that are already employed. This 'biased' demand raises the wages of those impacted. This rise in relative wages makes the use of the lower wage less skilled unemployed or underemployed feasible if their wage will remain low. Substitution in favor of the low wage workers will take place only if there has been a rise in costs of the other production techniques. Thus

substitution in production functions results in employment at the same time as income differentials are widening. Inasmuch as the poverty level is above the minimum wage level, this path, while providing the social benefits due to jobs, also consigns many employed to continuing poverty.

The third path--to modify final demand so that the demand for labor conforms better to the skills and locations of the present poor--offers more immediate hope for eliminating poverty than the other paths.

In fiscal 1950 federal government spending for research and development was \$1.1 billions. In fiscal 1964 the estimated expenditures for research and development was \$15.0 billions. Over the fourteen year period 1950-1964 the compound rate of growth of such expenditures was 20.6 percent per year. Obviously research and development spending generates jobs for scientific, professional and technical workers. If over this same period spending on city sanitation departments and highway and park wayside maintenance had increased by some 15-fold, job creation would have been biased toward the uneducated and the unskilled laborer.

The pattern of incremental demand for labor that has evolved in the postwar period has been biased toward the educated and killed in large part because of the bias in the rapidly-expanding government and private demands. Research and development, education and health services have been rapidly growing final demands--and these in turn tend to require skilled, trained and educated workers.

A program of increasing final demand so that the resultant increased demand for labor conforms to the available supplies should be an important ingredient of the war on poverty. Although there are many ways in which this can be done, one way to do it is to artificially impose a condition that would exist if the labor force were in large part homogeneous: an infinitely elastic demand for labor at a particular price. A program by which the federal government will stand ready to hire all those willing and able to work at the national minimum wage and then, given the characteristics of the available labor, develop useful projects for them, is an obvious way to generate homogeneity in the labor market. Instead of tailormaking the worker to some hoped-for job, this approach tailormakes jobs for the available workers.

Note that such a program concentrates the initial demand for labor on labor in excess supply. Only the second and subsequent rounds of demand will generate demand for labor in short supply--and the entire program would be biased against the highly specialized scientific and technical workers (with the possible exception of medical care). Thus both the direct and indirect inflationary pressure would be lower than from any program which increases aggregate demand while ignoring the composition of the present unemployed and low income workers. To the extent that the fear of domestic inflation is a barrier to the generation of tight full employment, such a made-jobs program lowers the height of the barrier.

Once all willing and able to work have jobs at the minimum wage, the minimum wage law becomes redundant. No problems of coverage, exemptions or enforcement exist for job support programs.

After all workers have jobs paying at least the minimum wage, then an incomes policy which raises the job support wage more rapidly than incomes in general rise will decrease the spread of incomes. In time this will both narrow the income distribution to some target range and move all those who can be affected by labor market conditions well above the poverty line.

BIBLIOGRAPHY

- 1 Anderson, Locke. "Trickling Down: The Relationship between
 Economic Growth and the Extent of Poverty Among American
 Families," Quarterly Journal of Economics, Nov. 1964.
- 2 Arrow, Kenneth. "Uncertainty and the Economics of Medical
 Care," American Economic Review, Dec. 1963, pp. 941-973.
- 3 Bator, Francis M. "Simple Analytics of Welfare Maximization,"
 American Economic Review, March 1957, pp. 22-59.
- 4 Friedman, Milton. Capitalism and Freedom (Chicago, 1962).
- 5 Galbraith, Kenneth. The Affluent Society (Boston, 1958).
- 6 Lipsey, R.G. and Lancaster, R.K. "The General Theory of
 the Second Best," Review of Economic Studies, 1956-57,
 pp. 11-32.
- 7 Lipsey, R.G. "The Relation Between Unemployment and the
 Rate of Change of Money Wage Rates in the United Kingdom
 1862-1957: A Further Analysis," Economica, Feb. 1960.
- 8 _____. "Structural and Deficient Demand Unemployment
 Reconsidered," in A.M. Ross (ed.) Employment Policy and
 the Labor Market (Berkeley and Los Angeles, 1965).
- 9 Okun, Arthur. "Potential GNP: Its Measurement and Signi-
 ficance," American Statistical Association, 1962 Proceed-
 ings of the Business and Economics Statistics Section,
 pp. 98-104.
- 10 Perry, G. "The Determinants of Wage Rate Changes and the
 Inflation-Unemployment Trade-off for the United States,"
 Review of Economic Studies, Oct. 1964.

- 11 Phillips, A.W. "The Relation between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom," Economica, Nov. 1958.
- 12 Ulman, Lloyd. "Labor Mobility and the Industrial Wage Structure in the Postwar United States," Quarterly Journal of Economics, Feb. 1965, pp. 73-97.