Wm. Filene's Sons Company

Washington, Summer, Hawley, Franklin Streets

Boston (1)

Office of President

P-936

July 21, 1943.

Marriner S. Eccles, Chairman Board of Governors,
Federal Reserve System,
Washington, D.C.

Dear Mr. Eccles:

Enclosed is a report prepared at our suggestion by Dr. Charles F. Roos, President of The Econometric Institute, Inc., 500 Fifth Avenue, New York City.

His proposals seem to us to be entitled to consideration by Federal Agencies having to do with problems of Inflation.

Cordially yours,

Edward J. Frost

Edward J. Frost

EJF:C
1 encl.

PROBLEMS OF INFLATION CONTROL

By

Charles F. Roos

O U T L I N E

I. Consumers' Spending Habits

   A. How consumers "budget" income
   B. Effects of increased income
   C. Leisure and absenteeism

II. Causes of Inflation

   A. Demand exceeding supply
   B. Purchasing power creates demand
   C. Why war purchasing power is excessive
   D. Pressure groups

III. Inflation Control

   A. Monetary sterilization or destruction
   B. Forced savings
   C. Taxation
   D. Price-fixing
   E. Rationing

IV. A Plan of Control for the United States

The purpose of this memorandum is to isolate and delineate some important causes of inflation and place in perspective the important inflationary forces at work today in the United States. An effort is made to differentiate between the symptoms of inflation and the fundamental causes. In this way a medium is provided for testing the effectiveness of inflation remedies. As so often happens in such syntheses and analyses, an effective and politically feasible remedy for the current situation is suggested.

I. Consumers' Spending Habits

Although much has been written about consumers' spending habits, very little factual information exists. It is only during the last five to eight years that statistical studies have been made which show how consumers' purchases are related to income. For the most part, the studies are unknown to the layman. Indeed, the majority of our economists, businessmen and political leaders only vaguely realize that demand or consumers' purchases are related in definite ways to income.

(A) How the Consumer "Budgets" Income

There is no difficulty in proving that the average consumer tends to spend constant portions of his income for each of the different articles of trade. A study published by the General Motors Corporation in 1939 showed that, other things being equal, each one-percent change in supernumerary income (national income less direct personal taxes and subsistence living costs) produced a two and one-half percent change in the demand for passenger cars. These percentages have remained practically constant for over twenty years. Similar studies made for shoes, paper, auto supplies, gasoline, fuel oil, cotton textiles, wool textiles, men and women's clothing, beer, eggs, corn, molasses, and railroad passenger traffic show similar constancy of relationship between demand and income. These relationships have continued during the war. Where demand as determined by income has exceeded supply, shortages which have led to rapid price advances or price control difficulties have developed.

Consumers also tend to save portions of their incomes. A study of the National Resources Committee showed that in 1935-1936 savings of single individuals began at incomes of $1,000. to $1,250. per year and rose with increases in incomes. Families began saving when their incomes were $1,250. to $1,500. per year. They, too, increased their savings as their incomes increased. For instance, families with incomes of $2,000. to $2,500. saved $449. each, or about 20% of their income.

At the end of 1942 the average weekly wage of industry was about $40. per week, or over $2,000. per year. When allowance is made for consumption on the farm and other imputed income, even the farm group had an average income well over $2,000. per year.

The cost of living was about 20% higher in 1942 than in 1935-1936, but only about half of the expenditures of the $2,000. group represent cost of living outlays. That there has been a considerable net gain in the savings of average individuals is incontestable.

So far the tendency of individuals has been to spend the usual percentage of income on goods as long as such goods were available and to save the balance. So far the supply of civilian goods has been about adequate to take care of the usual consumer demand. During 1942 inventories of consumers' goods were large and inflation could be controlled without great difficulty.

(B) Effects of Increased Income

Income has increased steadily during 1943 and for the first time genuine shortages have begun to appear. Consumers with excess income (savings under ordinary conditions) have plunged into the markets and "invested" part of their excessive income in goods. All during the first quarter of 1943 consumer purchases have been greater than they should have been on the basis of the demand-income relationships of the past twenty years. A result is that the inflationary control methods of 1942 - which, as we will see, might be called the sugar-water or ice-pack remedies - are no longer effective.

(C) Leisure and Absenteeism

Now that income greatly exceeds the supply of goods, absenteeism has increased substantially. The worker, unable to buy what he wants - usually a durable good or better-quality consumer good - even though he has the income, decides to invest in leisure. He prefers leisure to income which he cannot use.

Sometimes this leisure takes the form of a weekend orgy which leaves him unfit to work Monday morning. Sometimes the leisure is spent looking through the shops for merchandise which is becoming scarcer and scarcer. Sometimes the "leisure" is spent making or building at home the things which can no longer be purchased in the shops.

Let us not forget the story of the well-known executive of the last war who solved his absenteeism problem by inviting installment houses to over-sell furniture and other durable goods to his workmen. By playing up the theme of "keeping up with the Joneses" a situation was created in which the wives would not tolerate absenteeism. Durable goods are not available now and this plan cannot be adopted today. Moreover, our social mores have changed since 1917 and we would not want to use it today. But it is, nonetheless, useful in helping us to understand some of the problems of the day.

II. Causes of Inflation

In popular discussions monetary inflation is usually confused with or made a part of price inflation. While monetary inflation and price inflation are related, the connection is not nearly so close as popular discussion would indicate. It is possible to have monetary inflation without price inflation. In 1933 and 1934 the dollar was devalued and we had monetary inflation without corresponding price inflation. During the early part of 1940 we had price deflation coupled with an inflation of bank deposits, a form of monetary inflation. During the early part of 1937 we had price inflation and bank deposit deflation.

(A) Demand Exceeding Supply

Whenever demand exceeds supply, an increase in price is indicated. The price increase decreases the demand and usually increases the supply until demand and supply again come into balance. When the national economy is operating near capacity, there is great difficulty involved in increasing supply, so that the price increase operates only on demand.

(B) Purchasing Power Creates Demand

When the American economy is operating at capacity, purchasing power both in being and in potential, i.e., that which can be created by bank loans or by monetizing the public debt, is so large that price increases have to be large to shut off demand. Indeed, small price advances have the effect of inducing speculation by consumers and so increasing the demand. Small price advances "feed upon themselves" and bring about large price advances or inflation.

(C) Why War Purchasing Power is Excessive

During war-time a substantial part of the working force is engaged in the production of goods which are not to be consumed in the usual sense by them or the workers who are producing the goods that do go through the usual channels of trade. Yet the workers who produce war goods get paid in the same kind of money as those who produce consumers' goods. The war-worker thus receives claims for consumers' goods (money) which are on a par with the claims of the producers of consumers' goods. The total claims for goods thus increase substantially.

If the production of war goods is considerably greater than the usual savings of the public, excessive claims to goods or excessive purchasing power is necessarily created. During 1942 total savings were about $28,000,000,000 and excessive purchasing power amounted to something like 16 or 17 billion dollars. About $6,700,000,000 of this excessive purchasing power became "adventitious" savings in the form of increased demand deposits. Another $4,000,000,000 represented an increase in currency in circulation and the rest expressed itself in price increases and war bond purchases. During 1943 excessive purchasing power will amount to 25 to 30 billion dollars. This means that the public will receive 25 to 30 billion dollars in income in excess of what it would normally spend for the goods and services available and save on the basis of past relationships between incomes and demand and incomes and savings. These 25 to 30 billions of dollars of excess purchasing power, plus the uninvested savings of last year of about $10,700,000,000 represent the inflationary force at work in 1943.

(D) Pressure Groups

So long as a price advance calls forth increased total production, it performs a useful social function. But when total production cannot be increased, a price advance merely redistributes wealth and income.

In general, when everyone can earn sufficient incomes to provide for the necessities of life and some savings, the majority do not wish to change the distribution of wealth by inflation. Nonetheless, individual groups always want to improve their status. Everyone is opposed to inflation except insofar as his own income or product is concerned.

A common argument is that to change the income distribution for this or that group would have little or no effect on the price level of the economy. Yet an advance here leads to an advance there and the accumulation of a lot of little advances makes a big one. If we increase farm income, we necessarily increase the cost of living and so deprive the worker of purchasing power.

If we increase wages, we necessarily must increase prices (at least after the advantages of the lower costs due to increased production have been absorbed) and so deprive the salaried worker, the fixed income recipient and the farmer of purchasing power.

When the economy is operating at capacity, a change in the distribution of income or wealth is of dubious social advantage. The low income groups are usually receiving low income, because the public has valued their production least in the period during which production approached capacity. Indeed it can be effectively argued that the state should have no part in redistributing income once capacity production is reached.

III. Inflation Control

There are probably nearly as many methods proposed for controlling inflation as there are economists or business or political leaders who have studied the problems. But the methods which receive most attention embrace one or more of the following:

Monetary sterilization or destruction;
Forced savings;
Taxation;
Price-fixing; and
Rationing.

A brief discussion of each method and its effectiveness will be helpful to an understanding of the whole problem.

(A) Monetary Sterilization or Destruction

In 1920, 1931 and again in 1937 destruction of bank deposits (money) was effective in reversing inflationary trends. But it should be recognized that each of those inflationary situations was characterized by speculative demand and excessively high stocks of goods. Deflation of deposits, therefore, served merely to break the speculation and thereby bring about corrections in demand and price.

At the present time when stocks of goods are dwindling fast, deflation of deposits probably would not materially affect the inflationary trend. In fact, with the government financing the huge expenditures of the war deflation of deposits could not safely be tried. It necessarily would mean a sharp rise in interest rates and this would not encourage savings by the public.

Currency in circulation is rapidly increasing. This is partly because higher payrolls accompanying full employment require more currency in circulation. But this is not the whole story. A substantial part of the increase in currency in circulation can be traced to its desirability as a medium for savings. Although it bears no interest, it is negotiable at any time and so is preferred by many to low coupon bonds. This very negotiability feature, however, is what makes the increase in currency in circulation dangerous. It is likely to be used at any time as a claim for goods. On the one hand, it would be desirable to decrease the volume of currency in circulation; on the other hand, this would mean a substantial increase in the desire to possess the liquid asset, money, and hence adversely affect interest rates.

(B) Forced Savings

Many writers on inflation have urged forced savings as a cure for inflation. We actually have a small withholding tax which is to be refunded after the war. This is a form of forced savings.

This small tax, however, is none too popular and it is doubtful that the tax can be substantially increased. Yet it must be drastically increased if it is to be effective. Excessive purchasing power of about $50,000,000,000 is likely for 1943. If the public is forced to save only a part of this amount, it is likely to adjust its other savings so that little effect on the inflationary problem will be achieved. For example, let us say that John Public intended to invest $22,000,000,000 of his purchasing power in government bonds, $5,000,000,000 in currency, $18,000,000,000 in bank deposits, and $5,000,000,000 in bidding up prices of the available goods. The government enacts a plan of forced savings. John Public is forced to lend the government $10,000,000,000. He thereupon rearranges his budget to read $12,000,000,000 for government bonds, $5,000,000,000 for currency, etc. He may even cut the $12,000,000,000.

(C) Taxation

If it were feasible, the ideal solution would be to pay for the entire war out of current income. This would mean pay-as-you-go taxes equal in amount to the total government expenditures. Such a solution would so decrease purchasing power as to bring disposable income and, hence, demand in line with civilian supply. There would then be no problem of inflation. But such a solution, while ideal, has never been politically feasible. Even the 50% taxes of Great Britain are regarded by Britons as excessive. They probably could not be enacted in this country, and if they were, there would still be an inflation problem here.

Inflation cannot be controlled in the United States by collecting extra income taxes. The masses during the past year and a half have accumulated 20 to 25 billion dollars worth of purchasing power which would not be touched by new taxes and which could be turned into the markets at the drop of a hat.

Moreover, the average individual today can borrow extra purchasing power from the banks. Two years ago it made sense to talk about controlling inflation by closing the inflation gap (income minus taxes and supply of goods), either by increased taxation or forced saving because the masses did not then have savings of significant value. But the solution applicable to the conditions of two years ago would not work today. The problem today will not be solved by increasing income taxes.

(D) Price-fixing

Just as the primitive physician treated the temperature of his patient by blood-letting, ice-packs, etc., so some have offered to treat inflation by fixing prices. In cases where the price advances were caused by speculation, immediate results seemed to develop; by fixing prices below the market the speculator was confronted with a loss. As a result, speculative demand collapsed.

The OPA tried this remedy effectively early in 1942 when markets were highly speculative and when supply was more than adequate to meet normal demand. But as manufactured supplies shrunk, this method became less and less effective. Merchants and manufacturers refused to do business unless their costs were covered. Labor demanded higher wages to offset price increases.

The OPA Administrator did the only thing possible. He resigned. Supplies have continued to shrink and the new Administrator is under fire in every direction.

(E) Rationing

Price-fixing discourages production and so brings about the need for its corollary - rationing.

In its utmost simplicity rationing represents an attempt to substitute a scarce super-money (the ration coupon) for the excessive ordinary money. The first effect is to shift the demand from the rationed commodity to others which are growing scarce and are, therefore, likely to be rationed. When shoes were rationed early in the year, the demand for almost all types of department and variety store merchandise increased sharply. This increase in consumer spending intensified the shortages of merchandise and thereby increased the inflationary pressures. It hastened the day when other goods must be rationed.

The public is more and more coming to accept the inevitability of the extension of rationing. Extension of the piecemeal system of the last year necessarily means huge administrative staffs to classify and define the various commodities, to fix and continuously change the ration points for these commodities. It forces a choice between large enforcement staffs and black markets.

The problems of enforcement are especially grievous because for many years the American public has been taught that it is smart to avoid or even avade the law. The old Prohibition Law sired this attitude. The contradictory and often unnecessary orders of OPA have nurtured it.

Because administrators of the point-system of rationing cannot adequately anticipate changes in demand and supply of individual items, extension of this system can only undermine the faith of the public. It will surely lead to extensive black markets and impossible problems of enforcement. We have reached a point at which simpler plans, capable of easy administration, are indicated.

IV. A Plan for the United States

We know that at present prices the civilian supply of goods and services will total about 70 to 75 billion dollars per year for six months ahead. Yet the annual rate of purchasing power or national income will exceed 135 billion dollars. The problem is to match this supply with a purchasing power just about adequate to take it off the market.

Suppose that the goods and services represented by the annual expenditures of 40 to 45 billion dollars represent a desired standard of living. We could divide this up equally among income recipients. We might next decide that those who contribute most to the war effort by being employed should have additional goods and services, say 10 billion dollars worth. The remaining goods could then be used to relieve hardship cases (sickness, etc., which would prevent individuals or families from having incomes) and to raise additional revenue for the government. Perhaps as much as 10 billion dollars worth of goods and services could be distributed to those who are willing to pay a penalty for the privilege of buying them.

The pool of purchasing power which is to be distributed by the postal savings banks for a price in dollars would serve as a further check against black markets. Since the individual could get extra tickets from the government for a price, he would have little incentive to deal with a bootlegger. The effect of this pool is to socialize or nationalize the bootleggers' profits.

Each employer might be required to distribute with his payroll a super-money (ration money) equal to the time-period share of the average allotment plus a percentage of income. Present ration boards could distribute additional ration money to hardship cases and to recipients of dividends, interest and rent. Post offices could sell the remaining ration money at profits to the Treasury, which would be determined by the Congress.

As visualized under this plan, all goods would be paid for with equal dollar values of ration money and ordinary money. All businesses would be required to turn over to the Treasury amounts of ration money equal to the earnings or pay an adequate tax on the shortage. Producers of war goods would obtain their ration money for payrolls from the government.

For simplicity of administration the plan should apply to purchases of all goods and services. Professional people and farmers would receive ration money in return for their services and goods. They, like businesses, would have to account to the Treasury for ration money received in excess of what would be their share based on their income. Suppose, for instance, that a farmer sold $10,000. worth of goods, spent $300. for seed and fertilizer, $2,000. for labor and $200. for labor and $200. for taxes. His income would be $7500. He would be entitled to use ration money up to the amount which he would receive if this income were obtained as a salary and would have to turn over to the Treasury the remaining ration money.

For enforcement purposes a new tax law would be needed which would tax businesses, professional men and farmers some proportion of dollar earnings if they could not or did not turn in to the Treasury ration money equal to Sales - Purchases - Ration money paid to employees. Every income recipient would then have an incentive to observe the rules and black markets would not well develop. Such a law could be obtained easily after the plan was already in effect.

The ration money would be fully negotiable. If any individual decided that he did not wish to spend all his ration money income, he could give away the excess, sell it to others or turn it into the Post Office. The Post Office might even pay something for this ration money since it could be resold at a profit to the Treasury.

The initial distribution could, of course, take place through banks. As of a certain date each employer would draw on his bank for the ration money to be distributed to his employees. He could simply draw a check to the order of the employee payable in ration money.

Since purchasing power demand in ration money would equal the supply of goods and no merchant could sell without taking up such money, and since the money could only be redistributed with income, there would be no inflationary pressure. There would, therefore, be no need to fix prices.

Shortages of individual goods or services would develop from time to time. These could be relieved by raising the price in ration money, or by a superimposed product rationing.

The plan in essence amounts to forced savings. But it could be sold to the public on the basis of the need for rationing to secure equitable distribution of goods and services. It permits the individual to save as he wishes. He can still buy bonds, real estate, stocks, hold currency or deposits. Therefore, he does not regard the plan as one of forced savings.

The effect of this plan would be to sterilize part of the income of the nation until after the war. Money not accompanied with the ration money would serve only as a store of value for post-war purchases. Since one could increase his share of ration money by increasing his income, he would prefer to hold government bonds to cash. Introduction of the plan could thus be expected to make the Treasury's problems much simpler.

The plan endeavors to use the advantages of competitive control of demand and supply and ease of exchange that is possessed by currency. But it avoids the effects of the cumulated supply of money (currency in circulation, deposits, etc.) on the goods market which would be inevitable if we simply reduced dollar wages and salaries and made up the difference with government bonds or some other medium of investment.

In the above discussion the term ration money has been used to suggest that existing bookkeeping and banking facilities can easily handle the new ration tickets. To avoid confusion with dollars, however, the unit might be a point instead of a cent. A new unit has been suggested because the President has the power to ration goods and, hence, to issue ration tickets. Congressional action would be needed only to insure enforcement through a tax as suggested.

A simpler method would consist in over-printing on existing currency a ration validation. Individuals could use bank checks as today, but in writing a check in payment for goods or services would indicate that it is to be paid in <u>over</u>-printed money. If he did not have sufficient funds (over-printed money), he would be subject to the present laws regarding overdrafts.

July 27, 1943.

Mr. Edward J. Frost, President,
Wm. Filene's Sons Company,
Boston 1, Massachusetts.

Dear Mr. Frost:

This is to thank you for sending me the report prepared by Dr. Roos, which I have read carefully and found extremely interesting and ingenious, so much so that I have passed it along for study by our economic staff, with whom I wish to discuss it further.

Sincerely yours,

M. S. Eccles,
Chairman.

ET:b