

LP  
Nov 30/34.

COMMENTS ON PUMP PRIMING

I. The Problem of Recovery

Assume:

1. That 1928 was a year of approximate balance or equilibrium and therefore the volume of production of producers' and consumers' goods were in amounts proper to a condition of balance,

2. That the conditions for balance have not changed, so that the relative volume of production of producers' and consumers' goods necessary to insure balance would be that of 1928. At a lower price level the value of the production of producers' and consumers' goods would be less, but on the other hand technical improvements, etc., would call for a larger volume of production than in 1928 in order for the economic system to be utilized to the same degree of capacity. Moreover, recovery would mean some rise of prices, so that I will assume that the value of production of producers' and consumers' goods must regain their 1928 level before recovery will have been achieved.

3. Assume that the value of production in 1934 approximated that of 1932 with the exception that we shall assume no change in commodity stocks in 1934.

Proceeding on these assumptions, and using Kuznet's figures for 1928-1932, the following increases in annual production are necessary:

	(Billions)	(Billions)
Producers' durable goods	4.6	
Business construction	<u>3.7</u>	8.5
Consumers' durable	5.2	
Residential construction	<u>2.8</u>	8.0
Public and semi-public	1.2	1.2
Unallocable construction	<u>2.8</u>	<u>2.8</u>
		20.3

Inventories of durable goods decreased by 6.8 billion for 1929 to 1932 and of semi-durable and perishable goods by \$11.0 billion.

II. Factors Militating against a "Natural" Recovery.

- a. Relation of rents and building costs.
- b. Existence of unutilized capacity.
- c. Relatively high wage rates in many industries.
- d. High freights.
- e. Heavy interest burden.
- f. Liquidity complex.
- g. Labor situation.
- h. Disinclination to register under Securities Act.
- i. Anti-utility agitation.

III. Relief as a Recovery Measure.

On social grounds work is preferable to relief and as a means of recovery work-creating spending is far more efficacious than relief. There are some 17 millions on relief for which the monthly expenditures may amount to around 150 million. This is at the rate of \$27. a month for a family of three, or \$325.00 a year. Obviously this cannot be an increase over the amount the recipients on relief received before they become recipients. Moreover, even if the relief bill is entirely financed by Federal borrowing it probably does not constitute a net increase in national income, since the recipients of relief were formerly, at least in part, financed by state and municipal borrowing and encroachments on individual savings.

Not all of the unemployed are on relief. In 1932 it was estimated that 14 million people were unemployed, Allowing for

- a. Some decrease since then in unemployment, and
- b. For three dependents per wage earner

we may estimate that somewhere around 50 million people have at present their incomes and expenditures drastically curtailed by unemployment. In addition, many of the employed are still working part-time only. With no change in the business situation the number dependent on federal relief may very well increase, but this will not mean a corresponding increase in national incomes and expenditures. In other words, full employment at prevailing rates of wages cannot be obtained through relief expenditures.

#### IV. Theory of Pump Priming.

Pump priming may be described as a process of making it profitable to increase the production of durable goods. It becomes profitable to make durable goods when such goods can be used profitably. This requires more specifically that rents should rise above building costs and that additions to equipment are expected not only to earn sufficient to cover their operative and carrying charges but also make a contribution to profits. Generally such a condition arises when plants are fairly fully utilized and when unit costs may be reduced by installing new equipment. It is, of course, conceivable that unit costs may be reduced by new capital even when excess capacity exists. Pump priming is expected to increase incomes and the demand for goods sufficiently to create conditions making it profitable to increase the production of new capital.

5. The Problem of Magnitudes.

We may estimate that in 1929 the national monthly income amounted to around 7 billion and in 1934 to between 4 and 5 billion, say 4.5 billion. For the first nine months in 1934 the pump priming or income producing deficit of the Federal Government is estimated to have averaged 285 millions monthly or, in other words, to 6 per cent of the estimated national monthly income. Is this amount sufficient to accomplish the purpose? Obviously no precise answer is possible since it depends upon a number of unknown variables. We may, however, narrow the probable range by eliminating some factors that appear improbable. Thus I think that we can assert with some confidence that the monthly rate of pump priming deficit which prevailed in 1932 (136 million) and in the first 9 months of 1933 (121 million) was too small to have significant effect on the trend of business in the conditions then prevailing. The uptrend in business activity from November 1933 to May 1934, on the other hand, may very well have been associated with increased expenditures, the pump priming deficit for the 5 months beginning October 1933 averaging 333 millions monthly. This particular upturn was not associated with any other prominent factor of an activity stimulating nature though of course there may have been other factors at work which were not obvious. The average monthly deficit of 203 million for the period May to September, 1934 inclusive, was not in itself sufficient to arrest a decline in business activity.

On the basis of our very limited experience it is probable that the pump priming deficit should not fall below 300 million monthly

as long as it does not appear that recovery has gathered momentum on its own account. There are various considerations which suggest that the amount should be much larger. Referring back to section I and proceeding on the assumptions listed there, it will be observed that the annual production of durable goods should increase by 9.8 billion, the annual value of construction by 10.5 billion and inventories of durable goods should be increased by 6.8 billion. We should expect the quickness of response of these three types of production to increasing business activity to differ. Thus it is reasonable to assume that inventories would respond first, then durable producers' and consumers goods and finally construction. With increasing sales a larger inventory of goods in course of production becomes necessary; with increasing production there is a tendency to add to machines and replace old equipment; with still further increased production there will arise opportunities for new business construction, incomes are increased sufficiently to force rents up and make it profitable to engage in residential and commercial construction; and, finally, increase in local tax receipts will encourage and permit public construction. A recovery that is based on increasing inventories alone is a precarious one which can cease almost over night. Our recovery of 1935 was on this nature. A recovery that is based on construction is more firmly grounded since there is more assurance of income producing expenditure continuing for a considerable period in the future. It is essential, therefore, that pump priming be continued until there is evidence of a real spurt in privately financed construction. When that time is reached it will become safe to decrease public expenditures. Thus far there has

been probably some slight increase in inventories and in the production of durable consumers goods (e.g. automobiles) but there has been virtually no increase in building construction.

I should hazard the guess that for the purposes of pump priming, the monthly deficit should range between 400 and 500 millions. It is highly questionable whether anything less can make significant headway against the many forces making for continued depression.

6. Estimated pump priming deficit for the remainder of this fiscal year.

Estimates of P. W. A. Expenditures for Last  
Seven Months of the Fiscal Year  
1934-1935

<u>Agencies</u>	<u>Treasury Estimates as of Nov. 1st.</u>	<u>Estimates based on Actual Expendi- tures in 6 months ending Nov. 30.</u>	<u>My estimate</u>
T. V. A.	37	34	34
Loans to railroads	59	92	75
Loans & grants to states, etc.	425	97	116
Highways	201	280	242
Boulder Canyon	20	16	16
River & Harbor	87	110	110
All other	<u>512</u>	<u>179</u>	<u>214</u>
	1,139	808	807

I think that the Treasury estimates are far too high for "Loans and Grants to states, etc." and for "All Other". I have provided for a 20 per cent increase in the rate of expenditures of this type over the first six months of the fiscal year. In the case of "Loans to railroads" and "Highways" I have provided for the expenditure of the full appropriation.

There is no appropriation for relief for the last 4 months of the fiscal year. I have provided for expenditures of 170 million a month. The total estimate for the seven months is 1,190 millions.

I have likewise provided for larger C.C.C. expenditures than the Treasury estimates for the last three months of the fiscal year. My estimate for the 7 months is 280 millions.

The official estimates for general expenditures and receipts have proved reasonably accurate in the past and are accepted here. The above estimates are summarized in the following table:

Estimated Pump Priming Deficit for December 1934 to		
<u>June 1934, inclusive</u>		
(In billion dollars)		
Expenditures (excluding investment)		
P.W.A.	807	
General	1,779	
Relief	1,119	
C.C.C.	<u>280</u>	4,056
Receipts		
Total estimated	2,595	
Less processing tax	<u>315</u>	<u>2,280</u>
Deficit excluding investment		1,776
Monthly average		254

On the whole I feel that this estimate probably errs on the high side. If it proves to be correct I think that the pump priming deficit indicated will be inadequate to affect appreciably the course of business activity.

7. Secondary effects.

No mention has been made here of the secondary effect of public expenditures for the reason that I know of no way of estimating its magnitude. It appears to me to be illegitimate to apply the current

income velocity of all money to any given amount of new money since the income velocity of the new money may be much greater or much less than the income velocity of all money. All that I think we can safely affirm is that there is a tendency for incomes and expenditures in a given period to be increased by more than the amount of initial spending. Whether such an increase actually occurs depends on a large number of circumstances.

8. The efficacy of pump priming depends on the character of the deficit.

A deficit may be obtained by

- (a) Governmental refinancing of private debts
- (b) Reduction of income and corporation taxes
- (c) Reduction of indirect taxes
- (d) Relief expenditures
- (e) Public Works expenditures
- (f) Subsidies to state and municipal expenditures
- (g) Subsidies to private expenditures

The efficacy of a deficit as a means of recovery rises, in my view, from (a) to (g). I place subsidies to private expenditures highest in the list since if they are taken up, the amount of expenditure is greater than the amount paid out by the Government. The same is of course, true of subsidies to public bodies only in this case, owing to the nature of the projects, there is less likelihood of expenditures taking place rapidly. Broadly speaking quicker results may be obtained by enlisting the motives of private profit rather than social benefits. The most desirable type of private expenditure that should be subsidized is housing. The building of houses is socially beneficial, will bring direct relief to the most depressed industries, will not be done without



assistance under the present relation of costs and rents, and will be decentralized and speedily undertaken provided the incentive is substantial. If possible, it would be desirable to leave the precise amount of the subsidy subject to the President's discretion. If this could be done the President could raise or lower the amount of the subsidy according as rents changed in relation to costs. In addition to the subsidy it would be desirable to have the Government guarantee a mortgage for the balance of the cost of the buildings at a rate not to exceed 4 per cent. The minimum equity of the house owner would be the full ownership of the land. Slum clearance projects should be made more attractive to private enterprises. The National Association of Housing Officials suggests that if maximum rates of interest that may be earned are established, the Government should also guarantee minima.

9. Rate of Public Works expenditures (as of November 15th, 1934)

<u>Agencies.</u>	<u>Total Appropriations</u>	<u>Expenditures</u>	<u>Unexpended</u>	<u>% of Expenditures to Appropriations</u>
Tenn. Valley Authority	75	22	53	29
Loans to Railroads	200	125	75	63
Loans & Grants to States, etc.	789	148	641	19
Public Highways	695	451	242	65
Boulder Canyon	65	29	56	45
River & Harbor	345	145	200	42
Interior Dept. (a)	167	39	128	23
Navy (a)	318	57	261	18
War (a)	98	66	32	67
P.W.A. - All others (b)	895	260	635	29
Total	3,643	1,542	2,501	37

(a) Oct. 31st Taken from Treasury Statement on Status of Emergency Funds Statement No. 6 (Confidential)

(b) Includes Navy, Army and Interior Departments.

Source: Page 4 of Treasury Daily Statement of November 15th.

It will be observed from the above table that the expenditures in the form of "Loans to Railroads and for "Public Highways" have proceeded more rapidly relative to the amount appropriated than have other types of expenditures. The "Loans and Grants to States, etc." have lagged considerably behind other types of expenditures. The same is true of expenditures of the Navy and of the Interior Department.

10. Some fiscal aspects.

The gross interest-bearing debt as of October 31, 1934, was 26.6 billions. Deducting (a) recoverable loans of 3.1 billion (4.1 billion less allowance of 25% for losses - Combined Statement of Assets and Liabilities of Government Corporations as of September 30, 1934); (b) gold balance of 2.7 billion; and (c) cash balance of 1.8 billion leaves us with a net debt of 19 billion. We may contrast this with the net debt of the United Kingdom as of March 1, 1933, of £7.4 (7.8 billion minus assets of ~~1~~.4 billion) or roughly 37 billion dollars.)

In 1932 the debt of all non-federal governmental bodies in the United States was 17.6 billion (Census Bureau figures). The total net debt of all public bodies in the United States may be estimated at around 36.6 billion. The gross debt is around 44 billion. The total gross debt of public bodies in the United Kingdom is around £9 billion, or 45 billion dollars (local debts £ 1.3 billion - Statistical Abstract of United Kingdom 1934, pages 191-203). The national income of the United Kingdom may be estimated at 5.8 billion pounds (19 billion dollars) as contrasted with 4 billion pounds (20 billion dollars) in 1929 - (Colin Clark, Economic Journal, September 1934, page 395; The National Income, 1924-31, page 70.) Thus, the net National debt of the United Kingdom is 1.85

times the national income in 1929, and 2 times the national income in 1934.

The national income of the United States may be estimated at 55 billion in 1934, contrasted with 85 billion in 1929. The present net national debt of the United States is 0.22 times the national income of 1929, and 0.35 times the national income of 1934. The present total gross debt of all public bodies in the United Kingdom is 2.2 times the national income of 1929 and 2.4 times the national income of 1934. The present total gross debt of all public bodies in the United States is 0.52 times the national income of 1929 and 0.8 times the national income of 1934.

If our net national debt bore the same relation to our 1929 and 1934 incomes as the net national debt of the United Kingdom bore to the English national income, it would have been 157 billion and 110 billion dollars respectively. If the same comparison were made for total gross debt of all public bodies the figures would be 187 billion and 132 billion dollars.

The Australian Commonwealth debt almost equals the national income and the total debt of the Commonwealth and state governments amounts to almost three times the national income.

The service on our national debt less recoverable loans (25.5 billion dollars) may be estimated at \$700 million. This amounts to 1.3% of our current national income and to 0.8% of our 1929 income. The service on the English debt amounts to 7.3% of the national income.

#### 11. The impasse in building.

Table below presents estimates of costs of construction of

representative five room dwellings, brick and frame, from 1929 to April 1934, as estimated by the Procurement Division of the Public Works Branch of the Treasury, and rents paid by wage earners and low-salaried workers in the United States, compiled by the Bureau of Labor Statistics:

<u>Year</u>	<u>Brick</u>	<u>Frame</u>	<u>Rents</u>
1929	100.0	100.0	100.0
1930	97.4	94.6	97.0
1931	84.6	81.2	91.0
1932	75.0	73.0	80.5
1933 1st quarter	77.2	75.6	
1933	83.0	81.6	69.0
1934 1st quarter	94.1	94.4	June 67.0