

4-1942

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Recommended Citation

Schmidt, E. P. (1942). Post-War Economic Planning: Possibilities And Limitations. *Journal of the Minnesota Academy of Science, Vol. 10 No. 1*, 50-67.

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POST-WAR ECONOMIC PLANNING: POSSIBILITIES
AND LIMITATIONS

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Our primary job is to win the war; no consideration of, or pre-occupation with, post-war planning should be allowed to interfere with this primary job. For this reason the following comment will be confined to suggestions which, if now followed, should help in the post-war period, yet interfere in no way with the prosecution of the war; some of the suggestions should help the war effort.

In the post-war world national boundaries and possibly national sovereignty will be substantially altered; whether an intensified economic nationalism or greater international coordination of economic relations will ensue may depend upon how decisive the victory will be and who will be the victors. Elaborate plans are already under way for closer coordination of Canada and the United States, with some high officials on both sides of the boundary looking forward to what may turn out to be almost complete economic integration of the two economies. Explorations involving other countries, especially western, are under way. Because of uncertainties on the international front the following discussion will be confined largely to domestic issues which need attention now.

WHY PLAN?

During World War I, little or nothing was heard of post-war planning. A survey published in April, 1942, by G. B. Galloway disclosed that over 100 public and private agencies are at present engaged in some post-war planning or research. Why are we now so anxious about post-war conditions? There are at least two significant reasons, besides the fact that we are still conscious of the dislocations following the last world war. During this war we expect to devote over half our national income and resources to war.¹ This will mean that about one out of every two people, or at least two out of every 5 people will be producing for war or engaging in war. Thus the problem of post-war readjustment will be enormous. After this war we will have to find jobs for 5 to 10 million of the armed forces plus 15 to 25 million civilian workmen. Thus the magnitude of the task alone constitutes sufficient justification for some planning for that Demobilization day.

A second significant reason for anxiety about post-war conditions concerns the future of the private capitalist system. The last

¹ President Roosevelt in his budget message Jan., 1942, proposed a total expenditure of \$59 billions, 52 billions of which was for war purposes for fiscal 1943. Over \$80 billions have been proposed for the following year. Germany is believed to be devoting about 70% of her national income and resources to war.

war was followed by revolutions and new economic systems in Europe. Unless we make the private enterprise system function effectively once this war is over, we too may pass through a revolution, or into a revolution. If so, we may agree, years afterward, that we fought the war in vain. Blood, heads rolling in the sand, persecution and torture may be unavoidable then. Not pleasant thoughts, but we must be realistic. The entire world is undergoing a fundamental revolution, such as overtakes it only once in several centuries.

The post-war problems which we will have are traceable in part to industrialism and democracy. Under industrialism the bulk of the people have only their labor power to sell. If they make no sale they do not eat — except by sufferance. Democracy has taught the individual his rights, his privileges — and not much about his duties. People have become enormously articulate and conscious of power politics for economic ends.

The demand for economic security far exceeds the supply. Never again will mass unemployment be tolerated. Already people are saying, "If we can create full employment and a higher standard of living by preparing for war or making war, we surely can spend public funds for peace time purposes."²

The historic function of the enterprise system has been the gathering together of the factors of production: land, labor and capital, and organizing them into productive entities. So long as the employer performed this function fully and consistently he was not under serious attack. In the 1930's for the first time in the United States his social usefulness was widely questioned. In the post-war world, unless full, steady employment is provided this usefulness will not only be questioned, but the survival of the private employer will be problematical.

If the employer fails to provide employment, no government will be able to stay in power unless it takes over this function. The American people do not like their government becoming employer, they are not socialistic. But if they are confronted with the choice: starvation or socialism, they will select socialism, or more probably some form of regimented society.

That the state can do the entrepreneurs' job is not denied generally by economists; rather, question arises as to the degree of force which the state must adopt in order to carry out this function.

When once the government is the chief or the only employer and owns most or all the instruments of production the issues at stake will probably be too great to be manageable by the democratic process. If we place upon government the responsibility of assuring jobs, incomes and a high standard of living that government must

² Mrs. Eleanor Roosevelt, frequently reflecting the articulate and inarticulate longings and strivings of the masses, said, "If we can afford a war we can afford a peace where people are not thrown out of work." *Washington Post*, Mar. 15, 1942.

have power and authority to act, to command, to dictate and to implement a policy with certainty and continuity, once it is adopted. Here we are confronted with the problem that perplexed Plato and many of his followers down to the present day: the reconciliation of liberty and authority.

When the government takes over, the area and scope of liberty tend to shrink. In Europe the interventionist state has consistently driven roughshod over the liberties of the people—often in the name of the people. Huey Long is reported to have said that when fascism comes to America it will be done in the name of anti-fascism.

That government entrepreneurship and liberty may not be consistent with each other is suggested by a few recent experiences in the United States. The national government passed the Hatch Act, restricting substantially the liberties of public employees. One may ask legitimately, suppose we were all government employees would we all be deprived of our political liberties? When New York city took over the operation of the subways, Mayor F. LaGuardia, with a long record of labor sympathy, announced that the right to strike and the closed shop will not be tolerated. When the WPA workers went on strike, President Roosevelt said, "You cannot strike against the government." These are straws in the wind. But there are enough of them to justify us in raising the question whether liberty and freedom can survive if we shoulder upon the government the responsibility for our welfare, our jobs and incomes.

There is a significant parallel in the developments of Europe and America. Progressive income taxes, old age pensions, workmen's compensation, unemployment compensation, youth movements, class struggle and finally revolution all came to one or more European countries about one generation before they came to America either in actuality or as a threat. If this parallel continues we must expect in the United States a growing youth movement, intensification of the class struggle and finally revolution. The pressure groups which we are developing in this country—virtually unabated during our struggle with the Axis for survival—bodes ill for the survival of liberty in the post-war period. The pressure groups are not merely opposing each other but are manipulating the government in their favor. This probably must end in chaos. Why do they fight through the government? Because the government—not Wall Street or the employer—now determines their destiny. They know this and they propose to use the government for their own immediate—not long-time—purposes.

The problem of attaining full employment is severely accentuated by monopoly, whether by business executive or labor union executive. Collective bargaining is intended to destroy the free play of market forces. Since it is a monopolistic technique for the determination of a price (wages) we should not expect that collective bargaining can normally lead to full employment, any more than we could expect all capital funds to find a market if all the lenders

collectively fixed the price at which they would loan money, unless they selected that price which would enable all lenders to find borrowers. No one familiar with the character of the labor market and employment relations would deny that collective bargaining performs some useful purposes. It is the abuse of the power generated by collective bargaining which leads to permanent unemployment. "Abuse" here means ignoring the effect of the bargain on total job opportunities. It must not be assumed from the foregoing, however, that wage rates are the only factor determining the demand for labor.³

Some people view the foregoing comments with indifference. They say, "After all what we now have is merely an extension of governmental intervention which has been going on for a long time and this has not destroyed our liberties. Why get alarmed?"

The answer to this complacency is obvious. First, in Europe where the state has reached deeply into the lives of the people, liberties, and rights of the people and protection of minorities have largely disappeared. Second, for the United States the new thing that came into the regulation of business after 1929 was the attempt to deal with the central problem of capitalism: depression and unemployment. Previously regulation had been dealing with "incidental abuses," monopolies, fair trade practices, evasions of law etc., and had always presupposed that the private enterprise system was sufficient to bring about relatively full employment and adequate production, in spite of regrettable occasional and temporary lapses. Now, or after the war, the issue is or may not be incidental abuses, but job opportunities, full production, complete public control and operation.

Thus (1) the magnitude of the post-war conversion task and (2) the growing fear that the government in carrying out the responsibilities which will be thrust upon it will destroy our liberties and freedom account for the substantial pre-occupation of many people, both in government and outside, with post-war planning.

WHAT IS PLANNING?

Planning is the opposite of improvising. It assumes that what we have or will have results from actions previously taken. It assumes a certain cause-and-effect relationship in society which is subject to voluntary control.

The assumption will be made that to some extent we can pre-determine the character and scope of our tasks in the post-war period, and that by taking certain steps now during the war we can

³ Nearly all planners and "public spenders" ignore or underestimate the problem outlined in this paragraph. A. H. Hansen & Guy Greer, *The Federal Debt and the Future*, in Harpers, April, 1942, p. 489, express bounding optimism in the possibility of creating full employment by public spending and never mention the above problem. The most extreme statement of this type is that of A. P. Lerner, *The Economic Steering Wheel*, University-Review, June, 1941, Kansas City, Mo.

ease the shock of post-war transition and encourage full employment.

Space permits not much more than an enumeration of certain steps which might now be taken in the way of post-war planning and these steps will be divided into two groups: governmental and private.

GOVERNMENTAL PLANNING

Removal of Barriers to New Investment: There is a growing fear that America is a victim of secular stagnation, permanent depression and permanent mass unemployment, obscured, to be sure, by the defense and war boom for the time being. Prosperity and full employment absolutely require new investment. During the 1920's new capital issues amounted to \$5.7 billions annually. This created jobs, production and a high standard of living. During the 1930's this figure shrunk to \$.82 billions annually, which meant stagnation, unemployment, and hardship. According to Carl Snyder an average investment of over \$7,000 in plant and equipment is required to create one job in manufacturing. Clearly without new investment we cannot expect to provide job outlets for the 500,000 (net) young people entering the labor market annually.

Except for the last decade, government in the United States has been motivated in its economic aspects by the ideas of investors, entrepreneurs, innovators and expansionists. The rising standard of living of the masses was not the direct outcome of governmental efforts in behalf or at the behest of the masses; it was the result of the prosperity of business enterprise, which was compelled under the stress of competition rather than by government action (except through anti-trust action) to share the fruits of progress with the entire population.

Admittedly many abuses and excesses developed under this system. The depression of the 1930's was due, in part, to these excesses. Certain reforms became overdue. The government in its zeal for reform, however, may have paralyzed the goose that laid the golden eggs.

Some students attribute the stagnation of the 1930's to permanent "maturity" and argue that the day of substantial private investment is done, great capital building is past and therefore the government must take over the job of providing employment. An equally plausible—and to this writer a more plausible—explanation for our stagnation lies in the change of government attitudes and objectives especially with reference to the private inducement to invest including especially taxation and labor policies. It is difficult to believe that America has suddenly shifted from a period of thumping prosperity and expansion to stagnation within a single decade due to any inherent "maturity." Rather the explanation should be sought in the shift of the institutional and political environment in which business operates.

Between the pressure of increasing taxation, governmental red tape and controls, and the increased power of labor organizations, opportunities for profit—the mainspring of the enterprise system—are and will be much more severely restricted than they have been in the past. A free flow of new investment does not require large profits if the risks are correspondingly low. But if the risks of loss are increased by political or other uncertainty, it is not easy to see how an adequate flow of private investment to put men to work can be maintained. Profit is held out to the business man as a “bait.” To carry out his function of putting men to work and producing, the businessman does not have to make a profit, he only has to *expect* to make one. Once he loses this expectation, he ceases to expand; then he loses his incentive to take either his own money or to borrow other people’s funds and invest them in plant, equipment, raw materials, and pay roll. The result is stagnation—unemployment.

In recent years the government has endeavoured to raise the income and position of the masses by direct methods and to reduce the income of the wealthy—objectives worthy in themselves if in the process we do not all go down together. The surtaxes on large incomes and the failure to provide a system of averaging incomes for tax purposes destroyed most of the incentive for the groups with savings to invest in any but the safest securities. Discriminatory taxation on corporations cut heavily into another source of equity capital—so essential for starting new enterprises. At the same time, wage and labor policies were exerting and are apt to continue to exert steady upward pressure on costs. Perhaps even more important than what has been done is the uncertainty as to what is ahead with respect to these points for the future. Business can adjust to many controls and restrictions but it can never adjust to extreme uncertainty.

Thus in a period when labor supplies were redundant and employment opportunities were scarce, we have tried to correct the imbalance by making the position of the employee more attractive and that of the employer more hazardous. We have forgotten the most simple definition of the employer—one who provides employment.

Experience with getting war production under way in 1941 and 1942 is giving the general public some realization of the crucial importance of plant and equipment for doing the job; this is helping to rehabilitate the “employer” in the public mind and may facilitate the creation of an environment in which the employer can plan, make commitments and expand after the war.

Thus the removal of barriers to new investment and new employment opportunities constitute our primary post-war problem. Unless we solve this problem, all other efforts are likely to be relatively feeble.

Flexible Policy of Taxation, Public Expenditures and Debt Con-

trol: Conservative taxpayers generally have taken the attitude that public budgets should be balanced annually. However, there is nothing sacrosanct in the "year" for budgetary purposes. In depression years governments may well operate on unbalanced budgets, providing that in good years they have the courage to over-balance their budgets.⁴ In good years governments should not only live within their means but they should also pay off their debt or, if they have no debt, they might accumulate a surplus. Then when depression comes they should not levy additional taxes on their citizens (taxes tend to be deflationary) but by having previously put their financial houses in order, they should borrow additional funds to meet relief and other costs.

Fortunately the federal government did this in part during the period after 1920. From a peak of about \$24 billions the federal debt was reduced to under \$16 billions in 1929. As a result of high credit the federal government could borrow at very low rates in the early 1930's to help finance relief and unemployment. However, many taxes were increased at the same time and these burdens offset the benefits of federal spending. Unfortunately the state and local governments failed to contract their debts in the 1920's and as a result their credit in the 1930's was low or destroyed and the federal government for the first time in our national history had to step in to provide relief. State debt increased by about 100% from 1922 to 1929, during a prosperous period when it should have been reduced.

At present (1942) the costs of state and local government are declining or could be made to decline without causing undue suffering. Now every township, village, town, county, city and state ought to cut useless services to the bone and use all surplus cash to get out of debt. Then when a post-war crash comes, these governmental units could face it with some equanimity, knowing that the prospects for borrowing at low interest rates to put men to work would be good.

Once a proper financial plan is instituted for liquidating debt or building up a surplus during active periods, the next step should be the planning of a public works program. The president of a large Wisconsin factory recently outlined to the writer the type of planning which should be commenced promptly by every local and state government. He said that in the early 1930's when unemployment became common, the half dozen corporation presidents in the city held a meeting and after long discussion, each agreed to hire his due proportion of the unemployed and give them a few days work each week. Out of this came nothing but headaches. The men were

⁴ Many planners and spenders go further and state that the federal budget does not need to be balanced even in the long run. This is based on the view that a public debt internally owned need be no burden on society. Alvin H. Hansen is a chief exponent of this view.

hastily selected; many misfits were hired and the experiment had to be dropped.

Then and there they all decided that a more rational plan would have to be followed before the next depression. County planning had been in the discussion stage for some time. The president of the largest company was made chairman of a county planning commission. By 1939 the finances of the county were completely reorganized, the county was out of debt, and the commission had set up a comprehensive system of public works, with complete identification of priorities, from those subject to postponement for one year, others for two years, etc. With considerable satisfaction the president said to the writer, "We think that when the next depression comes we will be able to find the funds to put all unemployed men to the production of needed public improvements and there will be no boondoggling."

This is the kind of public works planning which should be commenced promptly by every public unit at every level of government. If private citizens everywhere let their public men know that they expect this kind of planning we will have taken a worth while step in avoiding some of the evils of the post-war period.

The National Resources Planning Board has prepared elaborate studies and blue prints and it is probable that when the time comes, the federal government will provide grants-in-aid for such projects to the states; the states in turn may make grants to local governmental units. But to make the program a success requires an enlightened citizenship and advance planning to avoid undue delays once the need for employment on public work arises.⁵

Postponing Manufacture of Consumer Durable Goods: It is sometimes forgotten that we did not experience a depression promptly after the last war. This is attributed to the postponement of most public works, private housing and the buying of motor cars during the last war. Not until 1920 did we produce as many motor cars as we did in 1917. Thus there was an enormous "banked up" demand for cars once the war was over. To be sure, the fact that the automobile was a new gadget helped to bring the prosperity of the 1920's. With it came the demand for highways, filling stations, etc., all calling for vast quantities of material and labor.

Of necessity we are deferring the production and purchase of many durable consumers goods now. In 1942, it is estimated, that we will produce not over 20% as large a quantity as in 1940. Probably we are still producing too many houses, too much furniture and a number of other items and the government should receive full cooperation in its attempt to reduce durable consumer goods spending, not only because the labor and raw material must be devoted to war purposes, but also because all such deferment will create

⁵ A. H. Hansen, *After Defense What?* National Resources Planning Board, 1941. See also the Board's numerous specific studies for excellent suggestions.

prosperity after the war. The Celotex Corporation estimated recently that there will be a potential market for 10 to 15 million new pre-fabricated family housing units in the immediate post-war period. The president of this company states that now the company has enough business to operate continuously on a seven day week and after the war the demand "will be several times as large," and new productive capacity will have to be created.⁶

By refusing to allocate raw materials for consumer goods or prohibiting their production or by levying prohibitive taxes on their purchase the government can go as far as it desires in implementing this idea.

Closely allied with the foregoing is the tightening of consumer credit, especially installment credit. The government should be encouraged in this program and should go a step further in urging all lending agencies to consider it their obligation to avoid making loans which will finance buying of new consumer durable goods or bidding up prices. Consumer credit outstanding reached an all-time peak of \$6.1 billions in August, 1941, and by the end of the year the figure still stood at \$5.6 billions. Installment accounts held by department stores on January 31, 1942, were 5% above the amount reported by identical stores for the same month in 1941. While the disappearance of most durable goods from stores will reduce installment credit substantially in the near future, some damage to the price structure has already been done by over-buying.

If the American people can not buy motor cars, refrigerators, new houses and other durable goods during the war, it is quite probable that we may have a boom of tremendous proportions after the war. In fact, in some quarters serious post-war inflation is feared unless we continue some war-time controls after the war. Thus it may be more realistic to speak of a "post post-war" depression. Roughly we may expect one year of substantial prosperity for each year of total war with serious dislocation and depression in certain war-industry areas amidst the general boom. Even if this relatively optimistic picture is true we may still require careful planning to make the foregoing bear full fruit and to try to prevent a post post-war depression.

Prevent Commodity, Land and Real Estate Price Boom: During and after the last war we had a tremendous inflation. Because we were nominally on the gold standard people did not regard it as inflation. Yet prices in 1920 were 150% above those in 1913. Wheat rose to \$3.25 a bushel during the last war. Obviously, this raised the value of wheat land in the minds of farmers and they bid up prices of farm land with the help of lending agencies. Booms in prices of commodities, land, real estate, etc., should all be avoided. This will help to keep the dollar cost of the war lower and will help to obviate readjustment after the war when once the war demands and huge

⁶ New York Times, March 19, 1942.

war incomes are things of the past. If such mistakes are avoided this will constitute some sound planning for the post-war period. The Roosevelt Administration has been very skillful in suppressing things it did not want and could readily avoid and other price inflation if it has the courage and will to do so.

In 1942 the national income available for private spending, after allowing some \$25 billions for taxes and war bonds purchases, will be about \$80 billions while the goods available for purchase by consumers will be only about \$60 billions. The extra \$20 billions will most certainly be used to bid up prices unless it is taxed away before it becomes purchasing power or a well administered system of extensive rationing and price ceilings is instituted. Inflation seems almost inevitable and if it comes will raise the money cost of the war substantially. This leads us to the problem of taxation during the war.

Tax Policy: Taxes generally are deflationary. At present tax rates should be increased so long as they do not interfere with the war effort and do not force unreasonable readjustments in civilian lives. The greater the war burden that is financed with taxes instead of borrowing, the easier will it be to carry the financial burden of servicing the debt in the post-war period. Furthermore, we should *now* plan a post-war tax structure which will stimulate, not burden industry. New investment in plant and equipment should not be penalized with taxes.

Payroll taxes upon the employer should not be increased now, or at least should be minimized after the war so as to furnish an incentive for, instead of penalty, upon the hiring of labor. Payroll taxes are a tax *upon the demand* for labor. The more the employees, the higher the taxes; the larger the payroll the higher the taxes. In a sense the payroll tax is the worst possible type of tax—it is more deflationary upon employment and the standard of living than a sales tax, contrary to popular impression. Only when a payroll tax serves some purpose besides raising revenue—such as reducing accidents in workmen's compensation or unemployment under experience rating in unemployment compensation laws, is it justified. Because such taxes levied during the war period may be difficult to abolish after the war, it is safer to avoid raising any additional revenue during the war from further increases in payroll taxes levied upon the employer.

Excise taxes ultimately may yield \$5 billion annually during the war; in the post-war period the mere repeal of these taxes when the government's need for revenue declines would constitute a stimulating effect on business. Excise taxes, effecting everyone, will be easy to repeal after the war, while the same will not be true of payroll taxes levied upon the employer.

The proposed withholding tax under which the government in effect would collect income taxes at the source merit consideration. Under the present income tax law the government has to wait until

Dec. 15th to collect the last installment on the previous year's income tax. Suppose the war should terminate in the first half of some year. Tax payers under the present system of collection would be liable for the taxes on the previous year's income; but the war is over with certain deflationary tendencies confronting us. The tax payer might find his earnings drastically cut, because the war is over, yet he has last year's taxes to pay. A withholding tax by collecting the money as it is earned would obviate this, and would reduce the tendency toward inflation by withdrawing purchasing power at once.

John M. Keynes, a noted British economist, early in the war urged the adoption of a system of taxes, part of which would be returned in installments to the tax payer after the war. This was designed to make more palatable the taxing paying process and also help to maintain purchasing power after the war. As a device for reducing spendable funds in the hands of the consumer during the war and helping to finance the war effort, the proposal has merit. However, after the war when these tax payers claim their funds, the government will have either to tax its citizens to get the money or will have to sell new bonds to those able and willing to buy them.

PRIVATE PLANNING

The boundary between public and private planning for the post-war period is not clear cut. The efforts of governments, individuals and corporations should be cooperative and united.

Reduce Private Debt: Private persons including business establishments should make every effort to pay off debts, in order that debt retirement and interest payments once the war is over will in no way constitute a drain on private incomes. If surplus funds are available individuals might consider the pre-payment of insurance premiums; moneys invested in war bonds will not only help the war effort but may provide a cushion of spendable funds in a post-war depression.

Research for New Products: The bulk of private planning must rest on business enterprise. One essential line of approach is the immediate development of new products or new uses for old products or raw materials through research activities. When developed and tested they should be placed on the shelf for post-war exploitation. By 1937, approximately 40% of du Pont's total sales were in products either unknown or not in production ten years earlier. The president of the Air Reduction Company (chemical) states, "A careful estimate of our business indicates that forty per cent of the increase in sales during the past five years has been due to the development of new products and to new uses for the Company's established products."⁷

The fastest growing companies, chemistry for example, spend a

⁷ *When the Defense Boom Ends*, Liberty Bank of Buffalo, N. Y., 1941.

much larger proportion of their gross receipts for research than do stagnant companies. American industry employs over 70,000 research workers in over 2,200 laboratories at an estimated annual cost of over three hundred million dollars. In many other businesses hundreds of men are devoting part or all their time to improving their products or developing new uses for existing products. In many industries, trade associations are devoting time and money to developing and improving products. All these activities should be stepped up.

Out of 181 manufacturers recently surveyed, the average company spent \$2 on research for every \$100 of sales. The chemical industry was in the lead—spending about \$3 on research for every \$100 of sales.

Mr. A. A. Berle, Jr., Assistant Secretary of State, in the October, 1941, issue of *Fortune* said:

“Every defense industry should have a research staff working on plans for producing peacetime goods. If any business outfit concerned with war production has not already done so, it is negligent—a negligence that will become an economic crime if it continues. A conference should be held to take inventory of these plans and to lay out a catalogue of the products that will be available when the war ends. The catalogue should be matched against known needs of the country for reconstructions.”

The system of priorities now in operation is forcing a diligent search for new materials. Out of this research will come new products and new uses for both the products and the raw materials. In fact, a fairly completely changed line of new products and services may emerge. Prefabricated houses, it is widely predicted, may replace in part the present method of piecemeal construction. The experience now being gained in prefabrication will come into its own after the war. This will call for readjustment and adaptation by hundreds of suppliers.

Whether or not there will be depression depends not upon what a few large manufacturers do, but upon what hundreds and thousands of employers do now.

An immediate beginning should be made. Where does one begin? The three indispensable steps seem to be as follows:

1. Developing new products and new uses for both old products and for raw material.
2. Market testing in restricted areas to discover the saleability of the product.
3. Tooling up or setting up a pilot plant to determine production procedures and costs.

Ideas for new products or new uses for old products do not come out of the sky. Every company should have a minimum of one person whose responsibility is to become completely familiar with all the activities of research agencies that are concerned with the company's production or with the raw materials that are used by the

company. This person should familiarize himself in so far as is practical with the research activities of other companies in the trade to discover the best opinion as to probable trends and new developments.

In each case the new product should be one, so far as is practicable, that can be produced with the same machinery or at least the same type of machinery and with the same labor. Furthermore, it is beneficial if the same sales force can market the new product. In short, the research should be conducted along lines which will require a minimum of readjusting of company practices. However, the inquiry on research should not be restricted to this objective. The branching out on the part of du Pont's, Eastman Kodak, and a number of other concerns illustrates how once a fundamental program of research is embarked upon, new avenues of production open up. Eastman Kodak, for example, although commonly associated in the public mind with cameras, produces such unrelated products as rayon, vitamin products, and a vast array of others. The du Pont researchers have frequently pointed out that this branching out into new lines was an inevitable outgrowth of the fundamental research carried on.

Thus it would appear that in the development of new products and new uses for old products or new uses for raw materials, the first requisite is a willingness to devote some time and resources to research. Once the requisite determination is made and the procedures set up, it would appear that the results tend to flow from this effort.

The technique for determining the marketability of new products has been highly perfected. It is no longer necessary to produce a product and immediately try to market it on a national scale. Rather, by careful investigations it is possible to discover typical consumer areas and test out the product under perfectly representative conditions to determine its saleability and to determine any weakness it may have.

As a part of this fundamental research work a pilot plant for production on a small scale can be set up. Dr. L. H. Baekeland is credited with having made the following statement, "Make your mistakes on a small scale and your profits on a large scale." The pilot plant has been called the "half-way house of industry." Sometimes it is called the "semi-works plant." David Pierce has summarized the four functions of a pilot plant as follows:

1. To study new processes or new types of equipment in order to secure data for plant design.
2. To study proposed variation in old processes in order to increase yield or quality or to improve the design of equipment.
3. To make sample batches of new products for introduction to the trade.
4. To manufacture for sale new or specialized products for which the demand is not yet large enough to justify full-scale plant operation.

There is substantial literature and body of knowledge on the planning and construction of pilot plants. Every university doing extended research, many trade associations engaged in research, and all the larger manufacturing plants have had extended experience in planning and constructing such semi-works or half-way plants. The trade associations, the National Association of Manufacturers, or the Department of Commerce at Washington, D. C., can put one in touch with either the plants that would be most useful, or can refer one to source material.

What Some Companies Are Doing: Are American businessmen doing something more than talking or thinking about post-war employment problems? Are they developing, but putting on the shelf, new products? Apparently the larger the company the farther has the planning gone beyond the "think" stage, although small as well as large companies are active.

The vice president of a small chemical company recently told the writer,

"In our business we can foresee a great development in the field of plastics. This means an expansion of the manufacture of organic products. We are therefore now reviewing our raw material situation and are spending hundreds of thousands of dollars to find better and cheaper methods for producing the raw materials which we will need. We realize that we may not be in position to build the plants to produce these raw materials during the present war emergency, but we hope to have our plans and processes completed, so that by the time construction materials become available, we will be ready to build plants, at a time when the materials of construction will be cheap and labor will be plentiful. This, of course, assumes that capital will be available for such construction, which may be a dangerous assumption as long as a large percentage of profits is paid out in taxes. This point deserves special attention by economists and legislators."

Again he said,

"Under our Plastics Division program, all salesmen are being called in from their field positions to attend a series of sales meetings. At these meetings they will be instructed to call upon prepared lists of firms doing national advertising whose products could or should use plastic materials in their manufacture. These products and firms will include those that are not playing a part in the Defense Program but should be important after the emergency. The salesmen will be instructed to approach these firms with the understanding that no materials are available now but they will be invited to work with us in solving all of the design, engineering, and technical problems arising from the use of the new plastic materials so that when the emergency is over, most of the preparatory work will have been completed."

The director of research of tool cutting manufactory in describing his company practice said,

"Anything which is to be placed on the market after the war should be marketed to a small extent now, in order to educate in-

dustry as to its utility and to develop manufacture to a stage where it becomes practical to produce without undue delay later."⁸

An executive of Eastman Kodak states,

"We are, partly by force of circumstances and partly deliberately, withholding from the market new models of apparatus, so that we shall have an accumulation of new goods to offer after the unlimited emergency is over."

One of the largest bus operators in the country says,

"One of the things we are definitely laying aside as a program to be taken up during the next business recession is a complete terminal building program . . . to maintain business during the next recession we hope at that time to be in a position to inaugurate and carry through a complete equipment modernization program."

The president of a farm equipment and building manufacturing plant states,

". . . We help farmers solve their building problems. We maintain a very large research department and expect to have new methods, new equipment, and some revolutionary changes in the whole farming set-up ready for after the war."

An executive of an oil products company made the following comment,

"Our company policy for a year past, and for such time into the future as circumstances may warrant, is directed toward an intensification of both technical and market research, but with the distinct understanding that the results of both phases of this research are to be placed on file (until) new products and new needs become necessary to bolster operations."

The president of an office supply manufacturing plant said,

"The cornerstone of our planning is in the perpetuation of our research and engineering without curtailment at this time when we can sell all that we can manufacture. The temptation might be to cut down on this expense which is a relatively heavy one. Instead of that, we have pushed our research and engineering in the belief that once the national emergency is over it will be very essential to have new things to sell, and the new ideas which are being developed will be the basis of new models, better equipment, and better handling of office problems."

The president of a food manufacturing establishment reports that all deferable maintenance and capital building is being postponed until the war emergency is over.

Another company states,

"Television is an infant industry and there appears little likelihood that television receivers can be manufactureed . . . until after the emergency. . . . Nevertheless, we are keeping television alive at

⁸ For a pre-Pearl Harbor survey of activities along this line see: *When the Defense Boom Ends*, Liberty Bank of Buffalo, N. Y.

very considerable expense by maintaining a regular program . . . television should be an important new industry in the post-war period."

The president of a rubber reclaiming company states,

"I believe the greatest hope of cushioning the shock of a future depression is through spending part of current earnings in research. An additional reason for doing this is that research is a recognized charge against earnings, and since taxes can be figured at about 50% of earnings, in many instances you get your research at half price."

The foregoing quotations are just a few among hundreds that might be mentioned. They reflect a consciousness on the part of business men that without post-war planning *now*, serious difficulties might be encountered. No doubt since these statements were made many businesses find themselves confronted with shortages of men and materials. Many have been forced to shift to war production. In a sense this simplifies the post-war employment problem because so much demand for consumer goods will be deferred that the need for essentially new ideas and new products is less than it was before Pearl Harbor.

Employment Cash Reserves: United Aircraft Corporation announcing nine-month sales of \$203,435,000, also announced a significant new deduction from them: a \$4,000,000 reserve "for the transformation from defense production to a peacetime economy." United was the first all-aviation company to set up such a reserve. But it was preceded by Sperry Corp., also fat with defense orders, which set aside over \$433,000 in the first half of 1941 for post-war "readjustments of facilities and personnel."

United and Sperry were agreed on the need for a cushion, but they disagreed on a vital point: United included its \$4,000,000 reserve in "cost of sales" (i.e., deducted it before figuring taxes); Sperry pessimistically figured its taxes first. If the Treasury should rule in favor of United, these rainy-day fiscal policies may become much more popular.⁹

The Hartford Electric Steel Corporation, a subsidiary of the Hartford Electric Light Company, has set up a fund to protect its workers against the time when a decline in the demand for steel castings will cause lay-offs. Under this arrangement, the company will pay monthly into a fund an amount equal to 5 per cent of its sales in each period. This contribution by the company is to be added to cost of products sold as a necessary item of expense with adjustment of selling prices if required over and above the tax credit received by reason of the expenditure.¹⁰

The Westinghouse Electric and Manufacturing Company assured its 78,000 employees February 11 of a "grubstake" in the post-war period when reconstruction might necessitate some lay-

⁹ *Time*, Nov. 17, 1941, p. 80.

¹⁰ *Wall Street Journal*, Dec. 15, 1941.

offs. Under the plan, Westinghouse will set aside an amount equal to one-half of 1 per cent of its pay roll each month.¹¹

Employment Policies: A midwestern meat packer, needing additional men, requested his personnel manager early in 1942 to contact garages and automobile dealers where men were being laid off due to the stoppage of the sale of automobiles. These men were given packing house jobs on condition that they would sign an agreement to go back to their previous employer when new motor cars were again available and on condition that their current employer would sign an agreement to take them back when this was practical. This facilitates an orderly shift of labor power now during the emergency and should encourage a more rapid absorption of these men into their previously chosen line of work.

When an employee of an eastern bank is drafted the bank gives preference to immediate members of the draftee's family in filling the vacancy on the theory that when the draftee returns to civilian life this practice will facilitate his reabsorption.

A laundry operator thought he noticed that many families used his services for the first time when they had a funeral in the family. So he wrote to 25 families having funerals that week offering his services during the week with his compliments. Twenty-one became customers and 17 became regular customers. Just at this time two of his men were drafted by the army. He replaced them with two others and his original thought was to use his new business-getting technique to expand his business. On second thought he concluded that he would like to give the draftees their jobs back after the war and so would delay using his new technique until after the war when he would want to be able to offer the returned soldiers their jobs.

These last three illustrations may appear to be trivial. Yet, they indicate the diversity of things which can be done and suggest that if a goodly number of employers begin to think about post-war employment in sufficient time, the transition may be somewhat facilitated.

In appraising the post-war problem we must also recall that every state in the union has a system of unemployment compensation. Generally men in the armed forces have their rights "frozen" under these laws so that when discharged from the army and navy such of them who had built up rights to unemployment compensation will be eligible for varying sums up to \$20 per week in some states and for varying numbers of weeks, with an average of perhaps two or three months. Civilian employees in both war and non-war industries are generally covered by these laws.

Furthermore, unemployment compensation is financed under a system of differential pay roll taxes, the tax rate applying to any particular employer depending upon his own regularity of employ-

¹¹ *N. Y. Times*, Feb. 12, 1942. See: E. D. Hawkins, *Dismissal Compensation and the War Economy*, Social Science Research Council, Washington, D. C., 1942.

ment. Thus in most of the states employers have this additional incentive to make a quick and effective shift from war time production to peace time production once the war is over. The combined thinking, planning and action under this unemployment-prevention incentive should facilitate further the transition to peace time operations.¹²

CONCLUSION

Employment, unemployment, and production are social phenomena resulting not from discernable, invariable natural laws, but rather resulting from human decisions. Because of the growth of industrialism and the extreme dependence of the great bulk of the people upon employment opportunities for their standard of living, these human decisions underlying our economy must be more carefully planned in the future than in the past. If we had a flexible price and wage system we might be able to make the transition to peace-time relatively-full employment with only individual initiative. But because of the pressure groups, price and wage rigidities and the magnitude of the post-war conversion problem, we should be prepared to combine governmental and private efforts in making the transition. Just as the best defense is an offense, so the best part of post-war planning must be done *now* by following the suggestions, if sound, made in this paper as well as others which may come to the mind of the reader.

In the period 1914-1918 no one could forecast the nature of problems following the war. We are in a similar position with respect to the problems to follow World war II. International relations following the war are a matter of guesswork. Nevertheless, their impact on domestic problems will be enormous; contrariwise, a strong productive post-war America will have a real contribution to make to the rebuilding of stable international relations. Domestic and international policies require coordination, although in this paper the former has been our concern.

STRENGTHENING THE NATION FOR WAR

STRENGTHENING THE PERSONALITY OF YOUTH

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ABSTRACT

The author presents a general discussion of the effect of war upon the personality of youth with suggestions as to how it may be

¹² Unfortunately a few important states, for example New York and Pennsylvania, have not incorporated this unemployment-prevention device in their state laws. See: *Stabilization Experience Manual*, American Legion Employment Stabilization Service, Minneapolis, for a significant collection of ways and means to regularize operations.