

BUSINESS CONDITIONS

A REVIEW BY THE FEDERAL RESERVE BANK OF CHICAGO

The Coming Wave of Defense Dollars

Demand to Rise Faster Than Output

The broad outline of the defense effort as now projected is becoming clear. Judging from present plans, the impact on domestic business seems likely to divide itself into four stages: first, the reaction of domestic businesses and consumers to the outbreak of the Korean war and the various pronouncements concerning the mobilization program; second, the stresses and strains incident to very rapid growth in Governmental purchases of war goods and services and establishment of control mechanisms; third, the accumulating pressures and distortions under a high but relatively stable volume of defense spending and a concurrent system of fairly strict civilian controls; and finally, the returning opportunity for deferred consumer expenditure which will result from the planned expansion of physical capacity and from some relaxation in defense activity after a strong military arm has been created. The first phase of the mobilization impact was concentrated in the last six months of 1950. The second phase will undoubtedly dominate developments in 1951.

By the end of 1950 the domestic economy had surged upward to unprecedented levels of activity. Business profits and consumer incomes had reached new peaks, and industrial production had touched a new record peacetime level. Total national output, in part because of price rises, was more than ten per cent above the 1948 crest. The average American was acquiring more goods and services for his own use and enjoyment than ever before.

In considerable measure, these new records were a result of private reaction to the Korean war. The obvious need for much greater military strength seemed to insure the future appearance of shortages and price rises. An upsurge of anticipatory spending ensued, strongest in the summer months but reappearing during the winter. Such expenditures, financed largely out of growing incomes and credit expansion, served to raise prices as well as production to record highs.

PATTERN FOR SPENDING IN 1951

Up to the end of 1950, Government spending had played only a minor direct role in the rise in total activity. The current year will bring a dramatic change. Within the next few months, Government spending for defense will increase sharply; yet the nation's economy will be much less able to absorb such an increase than it was eight months earlier when the big rise in private expenditures began.

The President's Budget Message indicates that by the end of fiscal 1951 cash outlays for defense and foreign aid programs will have totaled 25.7 billion dollars, slightly more than half the total Federal cash budget and 50 per cent above the previous year. For fiscal 1952 cash spend-

ing for these defense items is expected to total 48.6 billion, nearly double the 1951 outlay. The real short-term impact of increased defense spending upon the economy, however, will be even greater than these estimated figures for cash expenditures suggest. Actual cash expenditures have thus far lagged very much behind increases in appropriations, due to the necessity of formulating detailed programs and the difficulties involved in converting and constructing plants and establishing administrative organizations. As these inevitable delays are overcome, actual Government cash outlays for defense, on an annual rate basis, will begin to run considerably higher than the published annual expenditure figures. Cash spending for defense should start its most rapid rise this spring, and by the end of fiscal 1952 total Federal cash outlays, on an annual rate basis, may approach the peak yearly expenditure during World War II.

In addition, businesses will be making a growing volume of expenditures during 1951 for defense facilities, in anticipation of later Government purchases of finished products. The placing of Government contracts and other commitments will increase more rapidly than actual Federal expenditures, and will be the basis for sizable business expenditures to acquire capital goods and meet other costs incurred in the production of defense items.

The large and accelerating growth in spending for defense purposes, moreover, will be accompanied by continued growth in personal incomes as prices, output, employment, working hours, and wage rates increase. For both consumers and business, the threat of increasing relative shortages in materials will continue to aggravate their desires to use a major portion of their available funds in acquiring goods. With the expansion of production limited as described in the three following articles, the inflationary gap between total demand and total output is certain to widen rapidly in the immediate future.

Recently imposed price and wage controls, together with materials allocations, will probably hold the worst excesses of inflation in check during the coming months. To prevent excessive demand from pushing up flexible control ceilings, seeping through loopholes in regulations, and inundating suppliers when controls are finally relaxed, however, a large reduction in the abilities of consumers and businesses to spend is still required.

First and foremost, very heavy taxes are needed, to be levied in ways which will reduce private spending the most. Second, the availability of borrowed dollars must be held to the essential minimum. Third, long-term saving should be encouraged. In many respects these measures are painfully stringent, but they are necessary complements to the new system of direct controls. Only such an integrated program can promise to restrain eventual inflation.

The Battle of Production Begins

Total Output to Rise but Cutbacks Needed

While our armed forces continue the struggle in Korea, American industry has been given the assignment of providing the materials needed for a vast rearmament program. Military orders for goods are now being placed in large volume, and the first steps toward partial mobilization have been taken. By the fourth quarter of 1951 production of military goods, still only a trickle at the present time, will begin to flow in large volume reminiscent of World War II.

A strong attempt to increase our total output of goods must be made if the military procurement program is to succeed and if enough civilian goods are to be produced so that inflationary pressures can more easily be kept within bounds. Any conceivable increase in total production, however, will merely lessen the reductions in civilian output which will be necessary. New housing, automobiles, and major appliances will be affected most severely. As yet, the Government has not asked for complete elimination of most of these items as was done in World War II. Up to this point the pace of the armament effort apparently reflects the belief that a world-wide war will not begin in earnest during 1951 and that rearmament can be undertaken in such manner as to permit only a moderate disruption of the civilian economy.

Until recently war orders have been slow in coming forth from Government procurement agencies because of inadequate staffs, the need for firmer knowledge of the commitments that the armed forces will be expected to uphold, and the necessity of formulating detailed requirements. At the present time the process of

awarding contracts is accelerating rapidly. The automobile industry, which handled one-fifth of all equipment orders in World War II, already counts its war orders in billions, and the Detroit area is certain to become a great metropolitan arsenal once again.

Important orders which will be handled by plants in Chicago, Milwaukee, and Indianapolis also have been announced. Seventh District cities will be called upon to furnish a large portion of the aircraft engines, combat vehicles, and electronic equipment needed by the services. So far, most war contractors in this area are planning to fill the orders without interfering with the main production of their plants. Most large defense contracts will be handled in newly built factories, reopened World War II plants, or in factories producing civilian goods in the cases where this can be done without dismantling existing facilities.

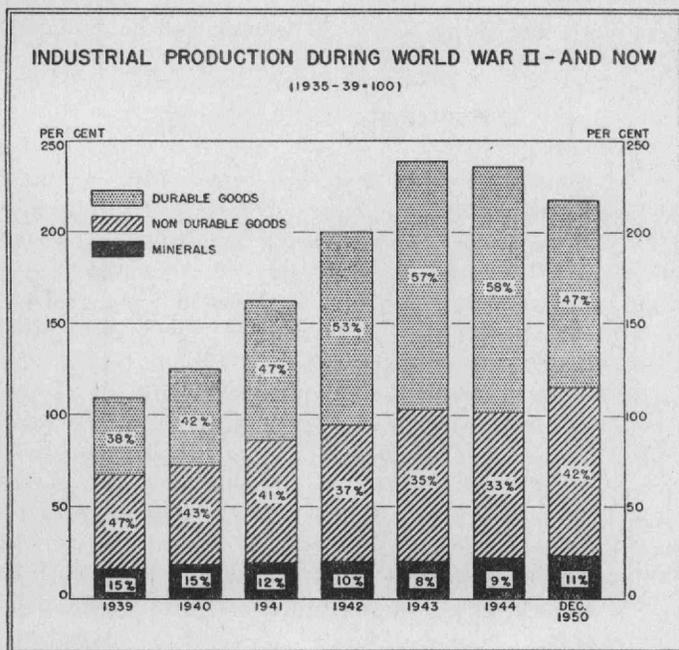
REARMAMENT SHORT OF WAR

Estimates of the rate of arms spending and foreign aid required by the present emergency are continually being revised upward as the graveness of the current situation becomes more apparent. At present, top estimates as to the rate of spending by the end of the year approximate 50 billion dollars on an annual rate basis. During the wartime peak year 1944, Federal purchases of goods and services for war purposes were almost 90 billion dollars, and each dollar bought considerably more at that time than it does today. On a relative basis the proposed effort is much less than in 1943 and 1944, when military outlays totaled almost half of the nation's total output of goods and services. If the 50 billion annual rate is reached by the end of this year, it will not be much more than 15 per cent of the total national output.

The production of hard goods for war (tanks, guns, and planes) will increase at a more rapid rate than the total of arms spending. President Truman has called for increasing output of planes by five times and combat vehicles by four times within one year. He also wishes the nation to have the "capacity to produce" 50,000 planes and 35,000 tanks. But the increases in production are from a low level. There is no intention as yet to aim toward the 96,000 planes, 29,000 tanks, and 19 million tons of shipping turned out in the peak war years.

HIGHER PRODUCTION

In contrast to the situation prevailing at the start of World War II, the outbreak of hostilities in Korea found American industry operating at capacity rates in such basic industries as steel and electric power. Industrial production last June was at a peacetime record



level, double the 1935-39 average. There was skepticism that the output of our mines and factories could be raised significantly above that level unless the nation were mobilized for war. However, the flurry of private spending set off by the international crisis pushed industrial production up eight per cent to the level which prevailed in the fourth quarter of 1950.

During the last half of 1950 about one million additional persons found jobs, leaving unemployment at the low level of about two million. Bottlenecks and shortages became severe in many lines, and the growing tightness of the supply situation was reflected in rising wage rates and in the prices of basic raw materials which jumped 40 per cent in the six months ending January 1.

The situation was far different in 1939 when the nation had not fully recovered from the depression. Over nine million were unemployed, and much plant capacity was idle. In 1939 the index of industrial production stood at 109; by 1943 it had more than doubled to 239. The durable component of the index, strongly influenced by tanks, planes, ships, and ordnance, leaped from 109 in 1939 to 360 in 1943. During this period most of the unemployed were absorbed into industry or the armed forces. Additional workers—the young, the old, and a large number of women who had not worked previously—were enticed into the war factories. Longer hours were worked. New plants were built quickly and equipped with modern tools.

No such relative increase in output will occur in the years ahead since resources of men and materials are already rather fully employed. But substantial increases in industrial production nonetheless will occur, even short of all-out war. By the end of 1951 the Federal Reserve Board Index of Industrial Production almost certainly will be pushed past the record levels established in 1943.¹

MORE CAPACITY?

Recently the Council of Economic Advisors estimated that total physical output of goods and services could be increased 25 per cent in five years. Such a rise must depend in large part upon new plant and equipment which will be added to the productive machine by that time.

Reducing hardship through industrial expansion presents the pleasant prospect that, barring all-out war, production of most types of goods will recover after an interim period of austerity. However, as plant and equipment are being constructed, supplies of such essential materials as steel and aluminum which may be utilized for the production of finished goods, civilian or military, are reduced. Present plans call for raising capacity of such industries as steel, aluminum, petroleum, and chem-

¹The usual measure of physical output of our factories and mines is the Federal Reserve Board Index of Industrial Production. The task of compiling and evaluating the data used in calculating the index becomes enormously complicated in wartime when emphasis is placed upon the production of new items or goods which are produced in much smaller quantities in normal times. In addition, arms require a considerably greater amount of processing per unit of material than do civilian goods. Military standards are high and exacting, and equipment now being ordered in most cases is even more complicated than was true during World War II. Since there is no history of production of many of the goods produced for the armed services, it is necessary to use man-hours adjusted for changes in productivity rather than units of output.

icals by 10 to 50 per cent within two years. Private business firms intend to spend 22 billion dollars on new plant and equipment in 1951, well above the previous record. Some of these programs, however, may be cut back as a result of restrictions upon private construction.

A great effort to expand total capacity is open to question if the outbreak of a world war is considered probable in the next year or two. With its present facilities American industry can out-produce Russia and her satellites by several times, but it is necessary to redirect this capacity into new channels if the needs of the defense program are to be met. The production machine which amazed the world in 1943 and 1944 already has been vastly expanded. During the past five years American business firms have spent 85 billion dollars on new plant and equipment. The chemical industry has doubled its capacity since the war; electric power capacity is up 40 per cent; petroleum, 35 per cent; steel, 16 per cent; and most other industries have increased their productive potential substantially.

Certain further increases of capacity are essential where they aid directly in the production of military goods, reduce unnecessary hardship, or attack bottlenecks. For example, the production of copper, nickel, and cobalt currently have not reached the top World War II rates which were achieved under the stimulus of subsidization. The Defense Minerals Administration is arranging for loans or grants of one-half billion dollars to enable domestic producers of 10 or 12 strategic nonferrous metals to expand output in high cost mines and to bring others into production.

Extensive pressure for a general increase in basic capacity in the immediate future can be justified by the need to disperse industry in the face of the prospect of atomic attack. This factor is given special emphasis when permits for accelerated depreciation of new facilities are granted. Some progress toward decentralization of industry has been achieved in the past 10 years as new plants were located with an eye to cutting transportation costs or giving access to a more adequate labor force.

CONSUMPTION MUST DECLINE

An accurate estimate of the extent to which cutbacks will be necessary in the private sectors of the economy is impossible at the present time; it is possible, however, to point to changes in the supply of particular items which can be anticipated. On the basis of present plans no significant hardships are now in prospect for the American consumer. Even with a 50 or 60 billion dollar defense budget, the supply of most items the consumer buys will be very large compared with any years previous to the 1947-50 period. Higher personal income, however, will tend to make goods appear to be scarce even though they are in plentiful supply relative to most of the years of our history.

Whereas metal-using equipment and construction which might be called "military durable goods" accounted for only three billion dollars of the military budget in

1950, this category may amount to around 25 billion at an annual rate by the end of 1951. The total of consumers' and producers' durable goods plus private construction expenditures was about 75 billion dollars in 1950. Apparently, these items will have to be reduced substantially. Most of the cuts will come from consumers' durables and from a reduction in housing and nonessential business construction. The National Production Authority has paved the way for production of war goods by creating the DO priority order and placing restrictions on the use of various commodities for non-defense purposes.

Substantial cutbacks are certain for all durable goods, but reductions of 40 to 50 per cent of total production (the maximum estimates through this year) would still leave far more automobiles, refrigerators, stoves, and vacuum cleaners than were produced in most prewar years. Items such as dishwashers, home freezers, and TV sets were not produced in quantity prior to World War II.

Wool clothing will be more difficult to obtain as the services increase their purchases and the Government begins building its stockpile. Other types of clothing, food, and most kinds of furniture probably will be in ample supply. Production of some consumer durables requiring materials in short supply can be maintained if substitute materials are found, but quality deterioration will result as manufacturers turn to less desirable materials.

An aid in the maintenance of unit production with limited materials would be to curtail production of higher priced lines. In the case of housing, automobiles, and television, the additional amounts of materials used in the larger units could be used to raise unit production if only the lower priced lines were produced. Direct controls would be needed to accomplish this end, however. Several manufacturers have announced their intention to concentrate on higher priced lines where profit margins are wider.

Consumers, like business firms, are in far better shape with regard to physical asset holdings than was the case prewar. Automobiles on the road are up 30 per cent over 1941, and the number of installed telephones has doubled. Similar increases doubtless occurred for other appliances. Sales of all of these items are at peak rates currently and will probably continue high as long as dealers' inventories permit. The well-remembered postwar process of "filling the pipelines" will soon begin to work in reverse.

WATCH OUT FOR THE AGGREGATES!

Some observers choose to find comfort in the tendency of total output of goods and services (the gross national product) to increase at a rate of three per cent per year over the long run. If military expenditures are currently eight per cent of gross national product and a doubling of these expenditures is contemplated, it is said that the increase could be relatively painless if it were spread over a period of two or three years. This type of thinking ignores the fact that increases in particular types of spending hit particular segments of GNP.

Some insight into the problem of the impact of arms spending can be gained by an examination of our experience during World War II. Consumer expenditures, the principal component of GNP, rose from 82 billion dollars in 1941 to 112 billion in 1944, an increase of 36 per cent. As the inhabitants of other belligerent nations underwent austerity programs in World War II, we apparently raised our standard of living by more than one-third. Was this actually the case?

The increase in consumer expenditures during World War II can be traced to a number of causes. (1) Consumer prices, despite controls, rose almost 20 per cent during the 1941-44 period, (2) many manufacturers maintained production at the expense of quality, and (3) the real increase in consumer expenditures that did occur was in soft goods and services, whereas durables declined. Nevertheless, in a general way everyday living standards did rise significantly in the United States during World War II. Many of the war workers had previously been unemployed or had worked at low-paying jobs. Automobiles, nondefense housing, and most appliances were not being produced at all during the war, but persons of meager means had not been buying these items anyway. Millions were able to buy more clothing and food (particularly meat) and engage in more diversions than had been possible in the thirties or even the twenties.

A general rise in the standard of living will not occur during the current emergency. We are starting to rearm after a period of tremendous prosperity during which men and materials were being utilized rather fully. As a result, the mass of the working people have been living far better during the postwar years than in any previous period. Their demand for items such as food, nondurable goods, and services which will remain readily available is unlikely to increase as greatly as it did during the early forties.

THE HUMAN FACTOR

There are important qualitative factors in a drive for maximum production which cannot be expressed in terms of dollars or index numbers. Government officials, business executives, and workers can do much to speed rearmament and increase total production by their ingenuity, skill, and desire to do a good job. Application of these qualities to the present emergency will be easier because of the accumulated knowledge concerning the mobilization of American industry which was gained during World War II.

If we are to make the best use of these human resources, the question of incentives cannot be ignored. Even in wartime the American system is based upon the profit motive. It is particularly important to keep this in view during the present situation. Poorly designed and administered price and wage controls or excessively onerous tax programs which serve to unduly restrict "take-home pay" of business or labor may achieve the goal of a pay-as-you-go armament effort but deter maximum production.

Manpower—Most Basic Resource

Expanding the Work Force Will Pose Great Problems

Manpower may be the ultimate limiting factor in determining how successfully the nation can carry out the enormous commitments arising from the present world conflict. Although shortage of basic materials looms as probably the greatest production problem during 1951, the persisting demands of the armed forces and the growing production goals will spotlight manpower as the number one problem during the longer pull.

The United States Department of Labor has estimated that four million persons must be drawn into defense activities by the end of the current year. This need is to replace those inducted into the armed forces and to step up total production. Still more would be needed if global war should develop.

The Bureau of Employment Security (BES) estimates the potential total labor force under full mobilization conditions at 69.1 million persons. This figure is about seven million greater than the actual labor force average for 1950. The BES states that the bulk of the additional civilian workers must be drawn from the ranks of housewives. Will the nation's housewives be able to fill the gap in the event of total mobilization? Will they be willing to fill the smaller needs of partial mobilization?

Unused manpower resources cannot be relied upon today as was true at the beginning of preparation for World War II. The eight million unemployed existing in 1940 could be assimilated into the defense and war effort with relative ease. Considerably greater ingenuity will be needed to draw employed people from the more secure and lucrative positions they now enjoy.

Actual deficiency of workers to produce, package, and deliver the weapons of defense is not likely even on a total war basis unless great destruction should occur in our own cities. The more immediate manpower problem, however, is to find the necessary workers to carry out expanded military production while maintaining high civilian output, without unduly upsetting the economy.

Ultimately the "guns vs. butter" issue will have to be joined, unless there is marked improvement in the international situation. Past history suggests, however, that restrictions of civilian output will be delayed as long as possible and that maximum total production and employment will be a required national goal even during the transition period.

Thus, total production of goods and services during the next several years—military plus civilian—should be expected to exceed even the record levels which prevailed during 1950. Obviously, it will not be possible to produce as many automobiles, houses, and home appliances as were made during 1950, or perhaps even to equal the production of the average postwar year. But these lines—important as they were in spark-plugging the boom of 1950—employ far fewer persons *directly* than is com-

monly recognized. In fact, the estimated total of all production workers in these industries—about 2.5-3.5 million—is scarcely above the added military needs alone.

In the very short run—say, the first six months of 1951—the pressures upon over-all manpower are not likely to be very great. Conversion to military production is of smaller magnitude and should be accomplished with much less dislocation than occurred in 1942. Nevertheless, some sporadic and temporary unemployment already has begun to show up in certain Seventh District industrial centers as the various shifts from civilian to military production have taken place, and as the accompanying material shortages have appeared.

MANPOWER DURING WORLD WAR II

During World War II the work force of this nation remained relatively free to move about, when compared with the restrictions placed upon the populations of other nations which were engaged in large-scale war efforts. Despite this freedom—or more likely, because of it—documented cases in which military production was curtailed because of inadequate work forces were few.

Such labor controls as were used were exercised through the War Manpower Commission (WMC), an independent agency which was created in April 1942 and continued in existence until November 1945. WMC's powers were mainly indirect. That is, no civilians were required by direct order to change over to war work or to move to specific locations. Rather, the agency attempted to keep workers from leaving essential occupations by requiring official statements of availability from the current job and to the new location. These referrals applied to movements out of a tight labor market area and also to job changes—from essential to nonessential work—within a labor market area.

The over-all shifts in workers during World War II can be classified under three headings: (1) changes in labor force status, (2) changes in industry and occupation, and (3) geographic movement.

Changes in Labor Force Status—Between 1940 and 1944 the total labor force rose from 56 million to 65.9 million persons—an increase of almost 10 million workers—and then receded to 65.1 million in 1945. During this time, however, the armed forces rose by about 11 million persons¹. Thus, the *civilian labor force* declined by about one million for the four-year comparison and dropped another 800,000 during 1945.

How was it possible to increase production so greatly with a declining civilian labor force? The answer to this question is contained largely in the fact that the total

¹The total labor force includes both military and civilian personnel. See *Business Conditions*, August 1950, for details of labor force measurement.

of unemployed persons declined from 8.1 million in 1940 to 670,000 in 1944, then rose to 1,040,000 in 1945. Thus, while the civilian labor force was not increasing, the number of employed persons did rise markedly. Moreover, average hours worked per week increased from 38.1 in 1940 to 45.2 in 1944, and then receded to 43.4 in 1945.

The growth of the armed forces obviously drew heavily from the male segment of the labor force. The male civilian work force declined by nearly seven million persons between 1940 and 1945. The female portion on the other hand increased by approximately five million.

Changes in Industry—Aside from agriculture, mining, and finance, all major divisions of industry expanded the number of employed persons during the World War II period. This is contrary to a somewhat widespread popular belief that manufacturing increased at the expense of other lines of work, such as trade and services. Many persons who had previously been employed in trade and service establishments did change over to manufacturing work, but their places were taken by new entrants into the labor force (see Chart 1).

Manufacturing employment increased from 10.8 million persons in 1940 to 17.4 million in 1943 and then receded to 15.3 million in 1945. During the actual war years the increase occurred almost entirely in the durable goods part of manufacturing, and of course, this meant largely war work. However, nondurable goods manufacturing employment remained practically constant throughout the war years. Here again it is undoubtedly true that many individuals shifted employment from nondurable goods activities to ordnance and other direct war work but were replaced by new workers. It must be emphasized also that much of the activity in the non-

durable goods industries was defense and war work, although it seldom was dramatized as such.

Perhaps the outstanding industrial shift of the World War II years was marked by the decline in two of the most primary occupations—mining and agriculture. Employment in agriculture dropped by one million between 1940 and 1945, and the number of miners declined by 90,000. During the same period total production from the nation's mines and farms rose sharply. The employment declines in mining and agriculture were but a continuation of longer-run trends at an accelerated rate. The apparent paradox is explainable largely in terms of technological changes.

Geographic Movement—A marked population shift occurred from small towns and rural areas to larger industrial centers during World War II. This shift was to the suburban parts of major industrial areas of the nation and to medium-sized cities. To some degree the rural to urban shift took place within the same regions of the nation, but to a still greater extent it consisted of two inter-regional geographic movements. The cities in the Southwest and on the Pacific Coast expanded sharply in population and in industrial development, while small towns and rural areas in the East and Midwest declined.

An exodus of agricultural workers, largely Negroes, took place from the southern states. Some of these southern workers moved into the newer industrial areas in the Southwest and West, but largely they went to the established industrial centers of the Eastern and Midwestern regions. With current pressures upon the labor forces in these sections, this exodus can be expected to continue, although perhaps not in as great a volume.

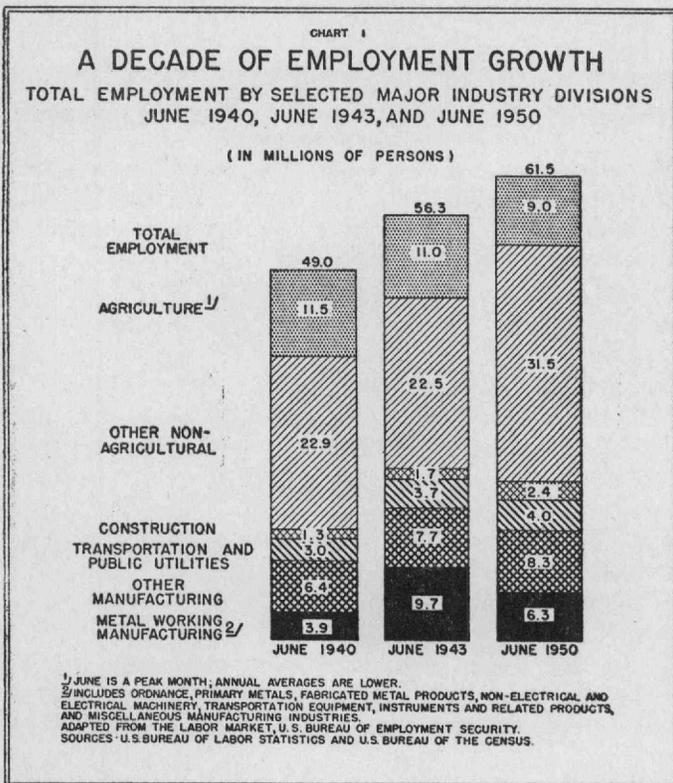
CURRENT MANPOWER POTENTIALS

Changes in manpower potentials are primarily changes in the basic population pattern. These occur only very slowly and obviously cannot be looked to as solutions of short-run mobilization problems. Either through controls or incentives it is possible to make more effective use of existing manpower, but in the short run the total amount of it is not subject to change.

During the last decade the population of the nation has increased most at the two extreme ends of the age distribution. The age groups which have had the greatest percentage rise in comparison with 1940 are those under 5 years and over 75 years. In fact, increases in persons under 5 and over 65 account for about 45 per cent of the total population growth.

It is obvious, therefore, that a substantial part of the enlarged population will reduce the manpower potential rather than increase it. This is because all of the very young and many of the aged require care from persons who might otherwise contribute directly to the mobilization effort. Moreover, food, clothing, and other civilian necessities must be provided in greater volume in order to care for the needs of this more numerous, but largely unproductive, segment of the population.

Normally the armed forces of the nation consist chiefly of males between 18 and 25 years of age. The



number of persons in the United States between 15 and 25 is about one and one-half million fewer than was the case a decade ago, with the bulk of the decline in persons between 15 and 20. This means that in the event of large-scale war there will be greater pressure from the armed forces upon the higher age groups, and in particular the males between 25 and 40. Thus, there would have to be heavy withdrawals from the most productive segment of the civilian work force.

The age group between 25 and 55 years is about six million larger than the level of 1940. This is a substantial rise, and it is this segment of the population which would have to supply the bulk of the increase in the civilian work force. There are several reasons, however, why it will be difficult to expand the total number of persons from this group who can be available for work.

A considerably larger proportion of the women between the ages of 25 and 35 now are burdened with the care of one or more small children. Obviously, it would be more difficult to entice such persons into work outside the home. To do so it will be necessary not only to have strong wage and patriotic incentives, but also to supply nursery schools and other community services in greater volume than was done during World War II. This in itself would mean a drain upon the total resources of the economy and hence upon total manpower. Thus, from a practical standpoint, the civilian manpower burden in event of total war will fall chiefly upon women between 35 and 55 and upon males above military age.

As previously stated, the Bureau of Employment Security has estimated the potential labor force total under war conditions to be 69.1 million persons. While recognizing the many limitations in a comparison of World War II with future requirements, this agency has projected the distribution which existed in 1945 to the current estimate. The most significant change is illustrated by the 6.6 million drop which would be required in "civilian" industries. This drop was not required during World War II because of the "slack" which existed both in the labor force and in industrial capacity prior to the start of war preparations.

Whether a labor force of 69 million could in fact be achieved depends upon the needs of the military forces and how obvious this need is to the population. There seems little doubt that such a labor force could be attained if total war were to come, and particularly if war should come to our own shores, but as indicated above, the attainment of it seems likely to be a greater problem than was faced during World War II (see Chart 2).

For the more immediate future, however, there are many factors which will make expansion of the labor force—and even its optimum use—very difficult. Some of these may be recapitulated as follows: (1) women not already in the labor force will require strong incentives to enter it; (2) workers will not change jobs, except by strong incentives or by legal requirement; (3) housing and community facilities will be required to attract workers to new locations; (4) anticipations of higher taxes and the fact of current prosperity will reduce the power of the wage incentive; and (5) for those

not having difficulty in maintaining their living standards, fear of continued inflation will lessen the desire to work long hours by reducing the incentive to save.

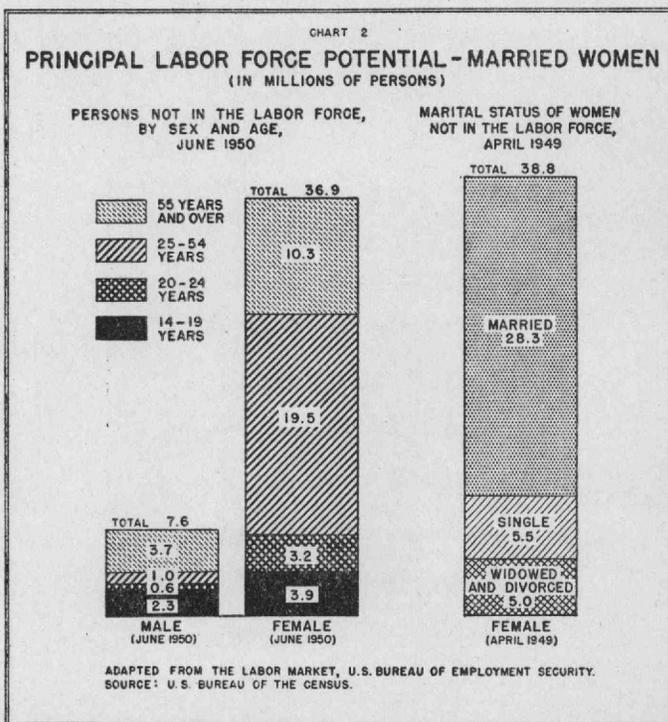
MIDWEST MANPOWER SITUATION

In most respects manpower problems in the Seventh Federal Reserve District will be like those in other regions of the nation. The emphasis upon metalworking creates certain special situations, however. Currently there are marked shortages in most of the skilled trades—machinists, draftsmen, tool designers, tool makers, and related skills. Also, most industrial centers in this District have had somewhat tighter labor markets during the past year because of their emphasis upon durable goods.

The automobile industry in particular is so integrated and uses specialized machinery to such a degree that it is difficult if not impossible to convert it gradually to defense production. Up to the present time this industry has received a larger volume of military contracts than any other, but these operations are scheduled largely in unused plants and at points outside the automobile manufacturing district. If there is to be a sharp reduction in the production of automobiles because of material shortages, it is likely to be difficult to keep the present work forces in such centers as Detroit, Flint, and Pontiac fully employed.

In like manner conversion in other metalworking industries is somewhat more difficult because of the necessity to replace presently used machinery with new machine tools.

Presumably most plants currently unable to obtain sufficient materials will obtain defense orders and will convert to military production, but the interim period is causing temporary hardship.



Farm Production Capacity to Expand

Amount Determined by Needs

The increased demand for farm products during the current partial mobilization arises from several sources—inventories, domestic consumption, and exports. The prompt rise in farm product prices following the outbreak of hostilities in Korea reflected primarily an increased demand for inventories on the part of producers, processors, distributors, and consumers. Needs were not immediately increased, but it was realized that additional demands would result from the international conflict, and therefore, larger inventories were desired. A substantial portion of the three billion dollar increase in "commercial, industrial, and agricultural loans" of weekly reporting member banks from June to November 1950 was used to finance inventories of farm commodities, particularly inventories of dealers and processors of farm commodities. Seasonal factors and higher prices also contributed to this higher volume of lending.

Rising employment and personal income in the present period of accelerated business activity have resulted in increased expenditures for farm products for personal consumption. Judging by World War II experience, the proportion of consumer incomes spent for farm products will rise further as civilian supplies, particularly of consumer durable goods, are cut back to permit increased production of armaments. Likewise, foreign demand usually increases in periods of military mobilization. Although demand from this source has not yet increased importantly, the potential is large and no doubt is an important factor in the desire to hold larger inventories.

It is impossible at this time to indicate the amount of farm products that will be needed in 1951 and succeeding years. The basic question is how should our national resources be employed, how much in the production of farm products, how much in the production of other things? Farm production could be increased very sub-

stantially in a few years if large additional amounts of labor and capital were used. But such additional resources will not be available to agriculture during the mobilization period. In fact, manpower will be released from agriculture to the military and to industrial employment as was done in World War II. Capital equipment will be available, but in lesser amounts than in recent years. The problem in general terms, then, is how much can farm production be increased from presently available resources? In this respect, the situation is like that of World War II.

OUTPUT UP SHARPLY IN WORLD WAR II

Total agricultural production increased from an index of 113 (1935-39=100) in 1941 to 137 in 1944. This level of production has been approximately maintained in subsequent years.

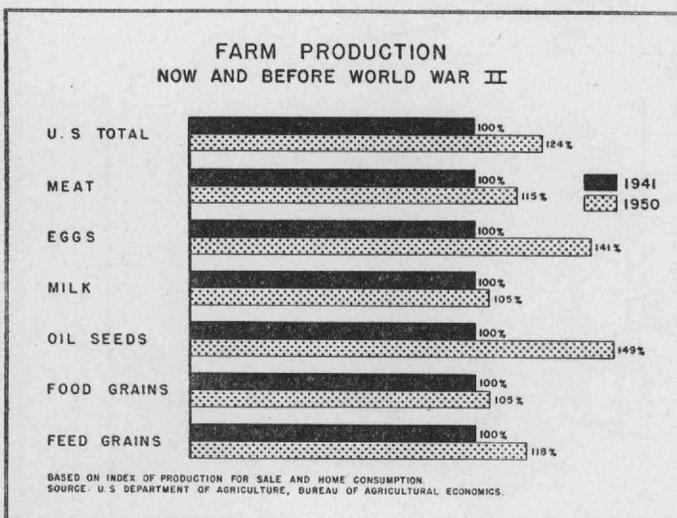
At the onset of World War II farmers were still recovering from the depression and drouths of the 1930's, and production was at a relatively low level in keeping with the then current demand situation. Rising farm prices and incomes, the unprecedented need for farm products, and the patriotic urge, however, provided necessary incentives for all-out farm production. In addition, many farmers put new technological advances into practice during the war years and, with the aid of favorable weather, greatly increased agricultural output.

The relatively liberal draft deferment policy for agricultural workers during the war helped considerably in maintaining the farm labor supply. Farm employment in 1945 was 10 per cent below the prewar average, but this condition was offset by increased mechanization, longer hours, and more efficient utilization of family labor on farms.

Farm product requirements continued at a high level after the close of World War II since food was needed not only to meet an enlarged domestic demand, but also for relief feeding in the war devastated areas of Europe and Asia. The use of improved technology on farms continued, and production climbed to an all-time record in 1949 when 357 million acres of crops were harvested.

OBSTACLES HINDER INCREASED PRODUCTION

Now that partial mobilization is under way, and particularly if total mobilization becomes necessary, the question of our ability to maintain and possibly exceed the levels of agricultural production attained in World War II becomes important. The situation confronting farmers today is very different from that facing them in 1941. Farm production, already at a high level, will be more difficult to expand than in World War II (see ac-



companying chart). The farm labor supply is again being reduced by losses to defense industries and the armed forces. These losses of farm workers may have more serious effects on production capacity than the World War II losses, as there are fewer "underemployed" persons in agriculture now than at that time.

Acreage needed for producing feed for work stock decreased nearly 17 million acres from 1941 to 1950. Slightly more than one-half as many horses and mules on farms now as prewar means that fewer crop acres can be freed for food production through the further substitution of tractors for draft animals. The present high degree of mechanization limits the possibility in many areas of further substitution of machines for labor and increases the dependence of agriculture on industry for essential machinery and equipment.

Possible gains from the further adoption of improved seeds may be less in the next few years than at the beginning of World War II. Today, for example, we get 90 per cent of our corn production from hybrid corn seed, now planted on double the 1941 acreage. At the beginning of World War II normal export outlets for most products were reduced, and since cotton stocks and other non-food items were plentiful, it was possible to shift land from them to food production. This year the cotton goal of 16 million bales is equal to the 1949 output which was nearly 40 per cent above the 1938-47 average production. Consequently, there probably will be little land available in cotton areas for expanded food production.

Fertilizer is used currently at double the 1941 rate. Further production increases could be obtained from heavier applications, but in view of the growing need for chemicals in armaments production, there is little chance that fertilizer supplies will be increased materially. Livestock feeding rates are also at a high level, and although further production increases can be obtained by heavier feeding, the possible gains appear somewhat limited relative to World War II years. Furthermore, livestock production can be expanded only as available feed supplies permit, and we are already cutting into feed reserves.

PRODUCTION HURDLES CAN BE OVERCOME

However, there are many favorable factors in the agricultural production situation. The over-all condition of the American farm plant is probably the best ever. Buildings have been repaired, new machinery has replaced much of the old, soils are in a high state of productivity, and the financial resources and debt position of farmers are generally favorable. In addition, the public and private facilities for informing farmers of new production techniques are more fully developed and more ably staffed than at any previous time.

Mechanization, while already at a high level, will continue to expand, both because of the probable scarcity and high price of labor and because of favorable prices and farm incomes. Labor costs are now triple pre-World War II costs, and mechanization appears to be the best way to curtail this production expense. With further mechanization, savings will be realized both in

labor expense and in hours of hard physical work, but power and equipment costs will increase. The economic pressure to increase size of farm units can be attributed largely to the increased use of power and machinery. Some expansion in mechanization will likely take place in the production of such high labor requirement crops as cotton, sugar beets, and hay.

While the possibilities of increasing corn production from wider use of hybrid seed are limited, there are real opportunities for increasing yields of other crops through the use of improved varieties which are both higher yielding and insect and disease resistant. If available, more lime and fertilizer will be used, and better conservation practices will be followed, although in all-out production the desired amount of cropland may not be retained in hay and pasture. Great opportunities exist in obtaining a wider adoption of improved soil management practices. A more general use of improved management practices on hay and pasture land could make a substantial contribution to feed supplies and to over-all livestock production capacity. Per acre yields of crops probably will continue an upward trend not only because of more fertilization and better varieties, but also because of improved methods in combating insects and diseases and better tillage practices. All leading crops have shown substantial yield increases in recent years (see Table 1).

Opportunities for increasing livestock production, in which technological progress has been relatively slow, may exceed those for increased crop production. Livestock breeding units on farms and ranches are one-seventh above prewar, and output per breeding unit is up one-fifth. Experiments in livestock feeding and management, breeding, and nutrition have shown particularly promising results, and a continued rise in the output of meat and milk per pound of feed and unit of livestock can be expected. More effective control of livestock diseases may also be anticipated.

Another favorable factor is the continuing progress made by farmers in adjusting resource combinations so as to achieve increased productivity. They will also use more resources. Moreover, a further shift of "underemployed" farmers and farm workers into nonfarm employment and the combination of small farms into larger

Crop	Unit	1939-41 Average	1948-50 Average	Per Cent Increase
Corn.....	bu.	29.6	39.8	34.6
Wheat.....	bu.	15.5	16.5	6.5
Oats.....	bu.	31.7	35.0	10.4
Barley.....	bu.	23.5	25.8	9.8
Rye.....	bu.	11.7	12.4	6.0
Flaxseed.....	bu.	9.6	10.1	5.2
Rice.....	bu.	48.0	49.7	3.5
Sorghum grain.....	bu.	14.7	21.5	46.3
Cotton, lint.....	bale	.5	.6	20.0
Hay, all.....	ton	1.3	1.4	7.7
Soybeans for beans.....	bu.	18.0	21.9	21.7
Peanuts picked and threshed.....	lb.	757.5	785.6	3.7
Potatoes.....	bu.	128.3	222.5	73.4
Tobacco.....	lb.	976.4	1,253.1	28.3

SOURCE: Calculated from data in official crop reports, U.S. Department of Agriculture.

Table 2
**HARVESTED ACREAGE OF PRINCIPAL CROPS
 SEVENTH FEDERAL RESERVE DISTRICT STATES¹
 1940, 1945, AND 1950**

Crop	1940		1945		1950	
	1,000 Acres	Per Cent	1,000 Acres	Per Cent	1,000 Acres	Per Cent
Corn.....	24,439	36.7	27,648	38.9	26,645	36.8
Oats.....	12,989	19.5	14,558	20.5	16,193	22.4
Wheat.....	4,352	6.6	4,076	5.7	4,344	6.0
All hay.....	16,410	24.7	14,760	20.8	14,976	20.7
Soybeans for beans.....	3,524	5.3	7,295	10.3	7,601	10.5
Grass and legume seed.....	1,937	2.9	1,866	2.6	1,993	2.7
Other crops.....	2,886	4.3	877	1.2	625	0.9
52 principal crops.....	66,537	100.0	71,080	100.0	72,377	100.0

¹Illinois, Indiana, Iowa, Michigan, and Wisconsin.

SOURCE: Compiled from official crop reports, U.S. Department of Agriculture.

ones will make agriculture more efficient.

The year-to-year increase in total farm production, however, from any or all of these developments will not be large. The greatest increase in World War II years was 10 per cent, 1942 over 1941; the next highest was six per cent, 1944 over 1943. This compares with year-to-year increases in industrial production of as much as 30 per cent. Agriculture, being a biological industry, does not respond quickly to changes in over-all demand. Over the years, however, a sizable change may occur.

If conditions should require the provision of greatly increased amounts of food for people in other countries in addition to ourselves, we would find it necessary to shift land from livestock production to the production of crops for direct human consumption. This would mean a lowering of United States' dietary standards, but would supply greatest amounts of food nutrients in the shortest time. Eventually, such a cropping system probably would have adverse effects on soil fertility and should not be resorted to unless absolutely necessary.

SEVENTH DISTRICT IMPORTANT AGRICULTURALLY

Significant changes in both crop and livestock production have occurred in the Seventh Federal Reserve District since 1940. Acreage of corn, oats, and soybeans, increased during the war at the expense of wheat and hay acreage (see Table 2). Since the war and due partly to controls in 1950, corn acreage has reverted to its pre-war proportion of cropland, while the share of land in oats and soybeans has increased over that prevailing during the war. Hay has declined in importance on the basis of acreage, but increased yields have maintained production. In the immediate future the acreage of both corn and wheat is likely to reach record levels, since acreage allotments have been eliminated. Soybean acreage will likely remain at about the 1950 level, but corn may replace a part of the soybean acreage on some farms. Oats acreage will probably decrease, some being shifted to corn. Hay acreage will likely be cut as production of grain crops is expanded, but with good weather a record level of crop production is in prospect. Probable acreage changes indicated above are in conformance with national crop production goals recently announced by the Department of Agriculture.

During World War II cattle numbers, both beef and dairy, increased (see Table 3). Since that time numbers have dropped but are now rising. In the next year hog and cattle numbers will increase, and there is some evidence that the downward trend in sheep numbers has been halted. Poultry numbers probably will increase only slightly, if at all, since prices are relatively unfavorable for poultry meat and eggs.

The Seventh Federal Reserve District states normally provide between a fifth and a fourth of the total United States' cash receipts from farm marketings. Consequently, the success with which farmers in this area adjust to the new and larger demands for farm products will have important effects on the total national result.

The agricultural output of the United States has been expanding since 1910 at a rate of about one and one-half per cent a year, sufficient to accommodate population growth and improve diets. Although some lines of farm production are slow to change, it is not at all improbable that total agricultural production in 1945 could have been increased as much as 50 to 70 per cent above the 1939 level except for the urgent demands made on other sectors of the economy. Thus, the World War II increase should not be considered a maximum in evaluating the capacity to expand production in agriculture. With favorable prices and markets, total farm output might readily expand as much as three per cent per year. Such an increase could be obtained without deterioration of soil resources, if present cropland were properly managed. Also, much land not now in crops could be cropped if improved to protect it against soil losses.

Farmers in the past have been very successful in producing needed supplies. There is every reason to believe that this will continue to be true. The primary requirement is that prices, and other resource allocating measures, be such as to provide the necessary resources to agriculture and the incentives for their intensive use. Even though farm production is currently at a high level, and recognizing that labor, machinery, and supply shortages may exist in some parts of the farm economy, it is not unlikely that production of farm commodities by 1955 will be 15 per cent larger than in recent years. Limiting factors, of course, include unfavorable weather and the suddenness with which the nation may be confronted by full-scale mobilization.

Table 3
**LIVESTOCK ON FARMS JANUARY 1
 SEVENTH FEDERAL RESERVE DISTRICT STATES¹
 1940, 1945, AND 1950**
 (In thousands)

Kind	1940	1945	1950
Cattle and calves.....	14,498	16,628	15,644
Milk cows.....	6,582	7,153	6,350
Hogs.....	23,303	23,108	25,409
All sheep.....	5,405	4,426	2,680
Stock sheep.....	4,113	3,088	1,902
Chickens.....	99,363	112,957	107,376

¹Illinois, Indiana, Iowa, Michigan, and Wisconsin.

SOURCE: Compiled from official livestock reports, U.S. Department of Agriculture.

SEVENTH FEDERAL



RESERVE DISTRICT

