

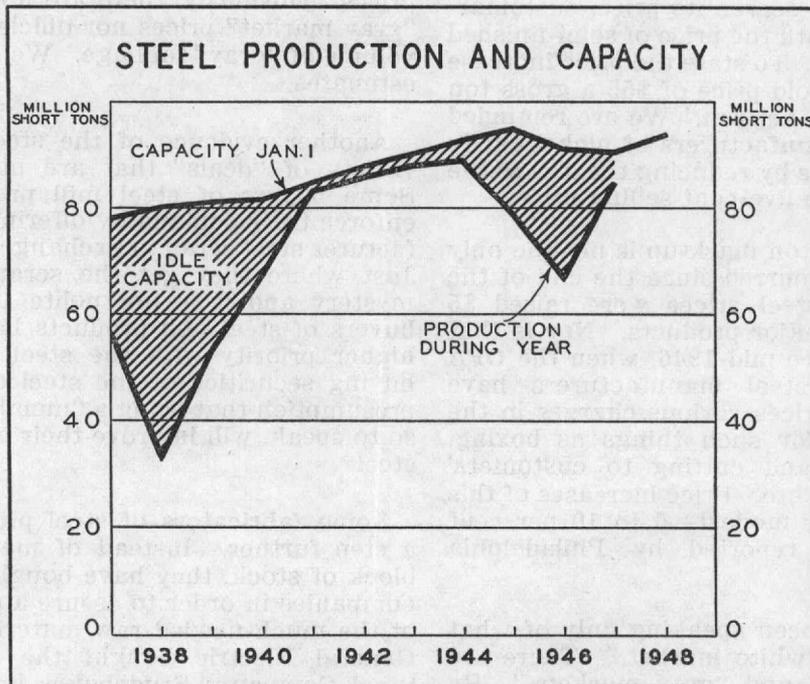
# THE BUSINESS REVIEW



## FEDERAL RESERVE BANK OF PHILADELPHIA

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### SHOULD OUR STEEL CAPACITY BE EXPANDED?



**STEEL** is the all-American "bottleneck." The most useful and the most inexpensive of industrial metals, steel is in great demand at home and abroad—it is desperately scarce.

Headlines tell about rising prices of steel, "gray" and "black" markets, the shortage of scrap, special "deals," rising exports, "expeditors," "daisy chains," and even gunmen. The reader has been deluged with statistics on production, capacity, costs, labor productivity, wage payments, and profits.

The United States Senate and various branches of the Executive Office of the Federal Government have made extensive investigations to determine whether steel producing capacity is adequate. Charges and countercharges have been made freely. This brief analysis of the major issues in the debate concludes that capacity for producing ingot steel could not be expanded much faster, if any, than the current rate without causing severe strains throughout the entire economy.

### Evidences of Steel Scarcity

When something is scarce its price, customarily, goes up. Last month the price of semi-finished steel went up \$5 a ton. To state the price increase more accurately, the old price of \$55 a gross ton was changed to \$54 a net ton. We are reminded of the days when manufacturers of nickel candy bars raised their prices by reducing the size of the bar; they retained the five-cent selling price.

The February \$5-a-ton mark-up is not the only price increase that occurred since the end of the war. In mid-1947, steel prices were raised \$5 to \$10 a ton on all major products. Nor is that the whole story. Since mid-1946, when the OPA began to crumble, steel manufacturers have added to their base prices various charges in the nature of "extras" for such things as boxing, crating, "pickling," and cutting to customers' specifications for size, etc. Price increases of this sort have been rather modest—5 to 10 per cent since mid-1946, as reported by Philadelphia buyers.

Thus far we have been speaking only of what might be called the "white market." There are also "black markets" and "gray markets." By this time, almost every American knows what the term "black market" means. Not so long ago, one steel fabricator paid \$240 a ton for steel selling at the mill at a price of \$90. That is an example of a "black market" price. Numerous other examples could be cited. "Black market" prices reached a high of \$500 to \$600 a ton in Los

Angeles. That is an example of the "black market" at its blackest—in steel.

A leading trade magazine of the steel industry estimated, last July, that the average premium price for steel was in the neighborhood of \$200 a ton. The volume of "black" tons was estimated at 2 million, which would give a conservative estimate that buyers paid, in desperation, approximately a quarter of a billion dollars *extra* for their steel. As a matter of fact, demand for steel was so intense last year that at least one buyer re-enforced his demand by sending armed gunmen along with his buyer bearing an order for 50,000 tons of steel—as reported in the Senate Hearings on the Problems of American Small Business. Apparently there was no shooting, but it might be presumed that the buyer got his steel.

Considerable steel is also traded in what is called the "gray market," otherwise known as the "daisy chain." "Gray market" operators are a species of middlemen or "expeditors" who know where steel is to be had and who also know who is in most desperate need of the metal—and they obtain steel for a price. For the service of supplying "gray" steel they, of course, charge "gray" prices. Obviously, there are no official figures of "gray market" prices nor official statistics of the volume of "gray" tonnage. We have not seen any estimates.

Another evidence of the steel scarcity is the variety of "deals" that are made to get steel. Some buyers of steel mill products try to re-enforce their demand by offering the steel manufacturer steel scrap in exchange for finished steel. Just where they get the scrap is sometimes a mystery and it is not polite to inquire. Some buyers of steel mill products have tried to get a higher priority with the steel manufacturer by buying securities of the steel companies on the presumption that being a "member of the family," so to speak, will improve their chances of getting steel.

Some fabricators of steel products have gone a step further. Instead of merely buying up a block of stock, they have bought out entire steel companies in order to assure a more reliable flow of the much-needed raw material. For example, General Electric bought the Mahoning Valley Steel Company; Studebaker bought the Empire Steel Corporation; Kaiser-Frazer bought the Chapman-Price Division of the Continental Steel Corporation; Hudson leased steel-making facilities; Borg-Warner acquired the Superior Sheet Steel Company. These are examples of what might be called "vertical integration." Incidentally, not so long ago the same kind of thing was

going on in the cotton textile industry when cotton was extremely scarce.

### Causes of the Scarcity

The steel scarcity is largely a heritage of the great world war and partly the result of the post-war boom in capital expansion, which of course is also related to the war. Perhaps we were all too naive in jumping to the conclusion that we had already emerged from the post-war reconstruction. An evaluation of the current scarcity in steel requires an examination of both the demand and the supply situation.

Current consumption of steel is as high as and perhaps greater than it was during the peak of World War II. In 1947 the steel-consuming industries utilized almost 63 million net tons, as shown in the accompanying table. That was almost precisely the tonnage used in 1944, the year of the peak war effort. It is about 30 per cent more steel than was consumed in 1940, as shown in the table. The table also shows that each of the major steel-consuming industries utilized substantially greater tonnages in 1947 than in 1940. Incidentally, there is no particular virtue in using 1940 as a basis of comparison, other than the fact that it is a recent pre-war year.

### STEEL CONSUMPTION (Thousands of net tons)

Markets	1940		1947	
	Tons	Per cent	Tons	Per cent
Automotive .....	7,965	16.4	10,234	16.3
Construction and maintenance .....	6,936	14.3	10,069	16.0
Railroads .....	4,019	8.3	6,029	9.6
Machinery and tools .....	2,330	4.8	5,787	9.2
Containers .....	3,068	6.3	5,589	8.9
All other including exports .....	24,342	49.9	25,107	40.0
<b>Total .....</b>	<b>48,660</b>	<b>100.0</b>	<b>62,815</b>	<b>100.0</b>

Source: Adapted from Iron Age, January 6, 1948.

Despite the high level of consumption last year, practically all of the steel consumers were clamoring for more, more. The 10 million tons of steel consumed by the automobile manufacturers produced only about 5 million vehicles, compared with that industry's 1929 peak of about 5½ million. That peak would doubtless have been surpassed last year had sufficient steel and other raw materials been available. The 10 million tons of steel used last year for construction and maintenance are also an impressive amount as contrasted with 1940, but again a great deal more would have been used had it been available. The same is true of the railroads, machinery

manufacturers, container makers, and others. A substantial part of this huge demand is in the nature of a backlog which had accumulated during the war, when steel for civilian purposes was severely rationed. Of course, the huge demand is due also in part to the large amount of buying power represented by ready cash and credit.

The supply situation in steel is portrayed in the accompanying chart. Please note here that we are shifting to *crude* steel produced, in contrast with *finished* steel discussed above. The difference may be explained with reference to last year's output. In 1947, the industry turned out about 85 million tons of crude or ingot steel at the mills. But by the time that unfinished steel was converted into various types of end-products it was only about 63 million tons of finished plates, sheets, pipes, etc. The difference is accounted for by such things as trimmings, rejects, and other unavoidable losses. The tonnage of finished steel products usually amounts to about three-quarters of the tonnage of raw or crude steel produced. Last year, steel production was substantially above that of 1946, when steel-making operations were obstructed by internal labor-management difficulties.

The long-time trend of production, as shown on the chart, is upward, but it is periodically subject to severe cyclical disturbances, as indicated by the shaded area labeled "idle capacity." It is apparent that the industry operated close to capacity in 1947, but in 1946 it operated at only about three-quarters of the capacity, and in 1938 at only about 40 per cent of its capacity. The worst year on record was 1932, when the industry operated at only 20 per cent of capacity. The record shows that the industry seldom approaches 100 per cent capacity operations except during periods of war and its aftermath. "Idle capacity" almost disappeared in 1916 during World War I and in the years 1941 to 1944 during World War II.

The term "capacity," like so many words, is frequently misunderstood and therefore misused. For some months, the adequacy of steel-making capacity has been widely debated, not only in the boardrooms of steel manufacturers but also in Congress, in Pullman cars, and in barbershops. "Capacity" may be defined as "the physical output of given specifications that an industry operating on its customary schedule with its existing men, machines, and methods can manufacture." This definition conforms fairly well with the way in which the steel industry actually calculates its capacity. For each furnace, the steel industry calculates capacity by taking as a base the largest monthly output of that furnace multiplied by twelve to get a yearly capacity rate, and deducts 12½ per cent as an allowance for maintenance

and repair, based upon experience. The result is practical rated capacity.

It is therefore apparent how the industry can occasionally operate at more than 100 per cent capacity for short periods of time, as it did during the last war. It is perhaps also apparent why operations quickly fall below capacity when interruptions occur such as strikes or shortages of raw materials or a breakdown in equipment. Steel making is a complex process requiring a great variety of equipment, a tremendous capital investment, and a variety of raw materials—chief of which are iron ore, scrap steel and iron, coal and coke, and limestone.

Basically, scrap is very scarce because during the war the United States shipped 125 million tons of steel and steel products out of the country, and much of this will never come back. It can be retrieved only at great cost. It is equivalent to nearly eight years' supply of "purchased scrap" with mills operating at nearly peak rates.

Pig iron, the alternate steel-making raw material, manufactured in blast furnaces, is also scarce. The "bottlenecks" here are inadequate furnace capacity, limited raw material—that is, iron ore—and inadequate facilities for shipping the iron ore and the shortage of good quality coke, the principal fuel used in smelting iron from the ore. Last year, the industry consumed all the ore that the shippers could carry from the Upper Great Lakes region down to the smelters in the Lower Great Lakes region. Incidentally, the situation is complicated by foundries which also utilize pig iron as a raw material and by the shortage of coke ovens that supply fuel for both blast furnaces and foundries.

Enough has been said to make clear that the question of steel-making capacity has many ramifications, both technical and economic. And we have said nothing about such things as types of steel or kinds of steel-making facilities required for their production. These and other factors complicate the questions as to what present and future capacity should be.

### **Should Steel-Making Capacity Be Increased Now?**

One group of critics contend that the steel shortage is due primarily to inadequate capacity, and has charged the steel industry with gross lack of vision. Perhaps steel manufacturers did lack vision in recent years by failing to expand capacity sufficiently, but if so they had a lot of company. For some months before the war ended, there was a great uncertainty in the minds of most people as to whether we would have a severe depression and unemployment at the end of the

war or whether we would have business prosperity and high employment. If our memory serves us right, the majority took the former view, and perhaps some steel manufacturers were likewise in that class. It is of course quite easy, though not quite charitable, to take advantage of hindsight and say that the steel manufacturers should have expanded capacity more than they did.

This same group of critics also cites the fact that the Federal Government had to spend a little over \$900 million to build additional steel-making facilities during the war. (The industry spent \$1,100 million to build additional facilities during the war.)

It may seem peculiar that capacity was reduced between January 1945 and January 1947, as shown in the chart. The explanation is that the industry dismantled some old run-down equipment that barely held together during the war—equipment which was costly to continue in operation. During 1947, the industry increased its capacity by about 3 million tons as reported by the American Iron and Steel Institute so that capacity presumably stood at about 95 million short tons on January 1, 1948.

Some steel manufacturers allege that present capacity is adequate. They point out that present demand is an unusual accumulation of unfilled needs but as soon as these unusual demands will have been satisfied, capacity will be adequate and idle capacity will be on our hands again as it has been so often in the past. This argument seems plausible when one surveys the past record of the industry. However, it may be a grievous mistake to set our sights for the future on the basis of past performance.

Some economists who are prone to rely on statistical projections say that the steel capacity ought to be expanded to 100 million tons by 1950; others advocate 110 million; and still others, 120 million tons in order to insure a full-employment economy. One fascinating study concluded that steel capacity by 1950 ought to be either a minimum of 98 million tons or a maximum of 120 million tons, depending upon whether 1950 will be a year in which output of producers' goods will be relatively high (a high-investment economy) or low (a high-consumption economy). The author very wisely refrained from making a specific forecast. This, of course, is not very helpful to the steel industry for the purpose of determining whether steel capacity should be expanded now.

Before attempting to answer the question as to whether we should expand steel capacity now, another aspect of the steel industry should be considered—that is, exports.

## The United States Steel Industry in a Post-War World

If we attempt to ascertain what our steel capacity should be by confining our analysis to the United States, the chances are that we shall arrive at only a partial answer and therefore an incorrect answer. It would be unwise to consider merely our own estimated steel requirements for the next five or ten years and disregard the needs and the productive capacity of the rest of the world.

We have emerged from the world's most destructive war with our own economy substantially intact, but the economies of some of the other nations are tottering on the brink of collapse. We have already assumed some obligations to help our neighbors in greatest distress, and in all probability we shall have to assume still more obligations. For purposes of convenience, these matters are usually discussed under such titles as "foreign aid" or the Marshall Plan, and usually a price tag is attached to the package, which of course runs up into billions of dollars. Actually, we are not giving them dollars—we are giving them so many dollars worth of concrete assistance in the form of steel, copper, wheat, cotton, and other things which they need desperately.

If we think we have a steel scarcity in this country, we should familiarize ourselves with the steel scarcity in some of our neighboring countries—England, Germany, France, India, as well as some of our American neighbors. Foreign needs for steel are revealed, to some extent, by noting the destination of our steel exports; but that tells only half the story because obviously the nations that are in the best position to buy are the biggest buyers, and increased exports aggravate the scarcity at home. What is the story on exports?

During pre-war 1937-1939, when we were producing 32 million tons of finished steel products a year at home, we exported 2 million tons. Last year, when we produced 63 million tons of finished steel, we exported over 6 million tons. Percentagewise, an increase in exports from 7.5 per cent of our production to 10 per cent does not appear frightening nor formidable. Nor can it be said to be the major cause of our steel scarcity. Nevertheless, it is a more important factor than the over-all figures reveal because in numerous instances our exports consist of those particular kinds of steel, such as sheet steel and steel pipes and tubing, in which the scarcity at home is most acute.

During 1947, the largest block of our steel exports, about 40 per cent, went to Latin-American countries. Almost a third of our exports went to Europe and Canada took 5 per cent. Last year, Canada took about the same percentage of our exports as she did in pre-war 1938, but the percentage of our exports going to other Western Hemisphere countries, chiefly Latin-America, increased quite substantially over pre-war, and the percentage going to Western European countries increased from 16 per cent of our exports in 1938 to 30 per cent.

The steel industries of some of the Western European countries are in very bad shape. In 1947, the production of finished steel in Belgium, Luxembourg, Sweden, and the United Kingdom was greater than pre-war 1938. But production fell somewhat below pre-war levels in France, considerably below in Italy, and pitifully below in Western Germany, which produced about half of the pre-war output of steel of the Western European countries. Last year, Western Germany produced only about 2½ million metric tons of finished steel, in contrast with almost 16 million tons in 1938. Another way of summarizing the steel situation in Western Europe is this: "In 1947, net imports of crude and semi-finished steel into Western Europe were more than three times as large as in 1938, while its net exports of finished steel had fallen by almost 80 per cent."

The Committee of European Economic Cooperation has estimated that the sixteen participating countries and Western Germany, which together produced 24 million tons of finished steel in 1947, ought to be able to produce 34 million tons in 1948. However, it should be noted that the estimate is based upon the assumption of favorable circumstances in all respects, including imports of substantial quantities of pig iron, scrap, and crude and semi-finished steel from the United States, which can scarcely be expected to increase.

### Concluding Observations

This does not seem to be the proper time to embark upon a large-scale plan to expand steel-producing capacity. This conclusion is based on the following reasons:

1. It is difficult to believe that the demand for steel will continue to expand more or less indefinitely at the rate indicated by the level of demand prevailing since the end of the war. Output last year equalled that of 1944—the World War II peak. Both years were abnormal. Indeed, groping for the ideal ton-

nage of capacity is really chasing a will-o'-the-wisp. By the time it were found and built it would be out of date. The real issue is the *rate* of expansion—a question of how fast we want to expand our industries making producers' goods in relation to consumers' goods.

Some of the present demand (though we do not know precisely what proportion) is in the nature of temporary post-war catching up. We already hear that some of our smaller industries are now encountering difficulties in selling all of their current output, and they may be forced to try the age-old expedient of reducing prices.

The present unusually high foreign demand for American steel is not likely to continue indefinitely. The German steel industry, which is now operating at a very low rate of only 20 per cent capacity, should return to some semblance of normal output some time. When that occurs it will relieve the demand upon our steel industry. Furthermore, the Latin-American countries that are buying so heavily from us now are not likely to continue buying at present rates. In pre-war years they bought substantial quantities of their steel requirements from Europe, and in time they may return to their former suppliers.

2. Capacity is being increased about as fast as we can afford to do so now. The additional capacity built last year and now under construction is admittedly a small amount when considered in terms of what it adds, percentage-wise, to the total but it is a large amount in terms of cost. The term "cost" here is used in two different senses: the money cost to the steel manufacturers who are building additional capacity, and the "real" cost to the country at large—that is, to the direct and indirect customers of the steel industry who will have to do without, while materials and labor are going into new plant and equipment.

To some steel manufacturers, the present cost of expanding capacity is apparently prohibitive. The cost of building a ton of steel-making capacity, consisting of blast furnaces, open-hearth furnaces, rolling mills, and all the auxiliary equipment needed to operate a fully-integrated plant, is said to be

somewhere in the neighborhood of \$150 to \$200 a ton of ingot capacity, compared to about \$75 a ton before the war.

To expand steel capacity at a faster rate now is going to cost everybody something in the way of delayed delivery of products made out of steel. Building additional capacity diverts steel from consumer goods to producer goods.

3. It is an eminently worthy goal to strive for perpetual full employment, which would presumably keep the steel industry—as well as all other industries—operating somewhere near full capacity. But as long as steel continues to be our basic industrial metal and as long as the industry continues to make steel by its present technology, which requires a huge capital investment per worker, and as long as the industry stands—so to speak—at the base of our industrial pyramid, it cannot avoid absorbing all the shocks of cyclical fluctuations in business. Owing to its basic nature, steel, of all industries, should guard against expanding capacity too fast. We should keep in mind the need for stability as well as growth.

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In the foregoing analysis, effort has been made to cover the major considerations but, obviously, all aspects of the problem were not included. For example, the possibility of substitutes for steel—the lighter metals, such as aluminum and magnesium. Many steel consumers are shifting to these metals rather than buying steel at "gray" or "black" market prices. Naturally, steel manufacturers are going to lose some of their customers permanently. It is impossible to ascertain how serious this competition will be, but it certainly cannot be laughed off.

If we have given the impression that the steel industry is unanimously opposed to expanding capacity, it has been inadvertent. Opinion in the industry is divided. Some companies are expanding, and others are not. One thing is sure: if all firms were engaged in a vigorous program of expansion, the current shortage of consumer goods would be intensified, the danger of over-expansion would be intensified, and our inflationary difficulties would be intensified.

# BUSINESS STATISTICS

Production  
Philadelphia Federal Reserve District

Production Workers in Pennsylvania  
Factories

Indexes: 1923-25 = 100	Adjusted for Seasonal Variation				Not Adjusted			
	Jan. 1948	Dec. 1947	Jan. 1947	Per cent change		Jan. 1948	Dec. 1947	Jan. 1947
				Jan. 1948 from				
				Month ago	Year ago			
<b>INDUSTRIAL PRODUCTION</b>	113p	116	113r	-3	0	110p	113	110
<b>MANUFACTURING</b>	115p	118	114	-3	+1	112p	115	111r
Durable Goods	125p	128	122	-2	+3	.....	.....	.....
Consumers' Goods	104p	107	105r	-4	+1	.....	.....	.....
Metal products	149	150r	145	-1	+2	143	143r	140
Textile products	72p	77	71	-6	+1	73p	76	73
Transportation equipment	124p	148	133	-16	-7	123p	147	131
Food products	130p	135	130	-4	0	126p	133	127
Tobacco and products	147	146	155	0	-5	121	106	128
Building materials	63p	57	58	+11	+8	51p	51	48
Chemicals and products	166p	165	161	0	+3	160p	163	156
Leather and products	92p	98	81	-6	+13	96p	93	84
Paper and printing	120	120	121	0	-1	119	121	120
<b>Individual Lines</b>								
Pig Iron	100	104r	99	-4	+1	97	103r	96
Steel	119	122r	113	-3	+5	117	115r	111
Iron castings	92	93	101	-1	-9	84	87	92
Steel castings	83	97	110	-14	-25	88	93	116
Electrical apparatus	229	224	225	+2	+1	215	218r	212
Motor vehicles	44	51r	59r	-13	-24	39	40r	51r
Automobile parts & bodies	137	143	128r	-5	+7	135	140	126r
Locomotives and cars	60	59	69	+2	-13	58	59	67
Shipbuilding	.....	.....	.....	-28	-10	.....	.....	.....
Silk and rayon	81	86r	85	-6	-5	83	88r	87
Woolens and worsteds	77p	84	74	-8	+5	78p	78	74
Cotton products	40p	38	51r	+5	-21	41p	41	52r
Carpets and rugs	109p	110	84	-1	+30	105p	107	82r
Hosiery	78	86	74	-10	+6	81	84	77
Underwear	150	154	144	-2	+5	147	152	141
Cement	114p	100	103	+15	-11	80p	82	72
Brick	64	60	63	+6	+2	59	59r	58
Lumber and products	32	29	30	+3	+7	29	29	27
Bread & bakery products	.....	.....	.....	-5	-7	106	111	115
Slaughtering, meat pack.	104	113	113	-8	-8	111	120	122
Sugar refining	152	157	78	-3	+94	105	102	54
Canning and preserving	220p	225	210	-2	+5	213p	227	203
Cigars	148	147	157	0	+6	121	106	128
Paper and wood pulp	102	99	94	+3	+8	101	100	93
Printing and publishing	123	124	126	-1	-2	123	126	126
Shoes	91p	110	97	-17	-6	93p	94	99
Leather, goat and kid	92p	85	66	+8	+41	98p	93	70
Explosives	100	104	98r	-4	+2	100	103	98r
Paints and varnishes	116	109	114	+6	+2	105	106	102
Petroleum products	214p	217	209r	-1	+3	210p	214	207r
Coke, by-product	.....	.....	.....	.....	.....	.....	.....	.....
<b>COAL MINING</b>	180p	181	167	0	+8	180p	175	167
Anthracite	71p	73	77	-2	-7	73p	73	78
Bituminous	70	70	74	0	-5	70	70	74
<b>CRUDE OIL</b>	81p	93	97	-13	-16	93p	98	111
<b>ELECTRIC P'WR—OUTPUT</b>	294	295	316	0	-7	282	277	304
Sales, total	475	469	440	+1	+8	503	501	467
Sales, to industries	490	478	453	+3	+8	505	492	467
<b>BUILDING CONTRACTS</b>	348	354	328	-2	+6	338	336	318
<b>TOTAL AWARDS+</b>	130	134	75	-3	-74	144	149	83
Residential+	146	112	100	+31	+45	118	108	81
Nonresidential+	125	157	78	-20	+60	135	169	85
Public works & utilities+	185	183	64	+1	+191	237	219	81

\* Unadjusted for seasonal variation. p Preliminary.  
+ 3-month moving daily average centered at 3rd month. r Revised.  
\*\* Increase of 1000% or more.

## Local Business Conditions\*

Percentage change— January 1948 from month and year ago	Employment		Pay Rolls		Building permits value		Retail sales		Debits	
	Dec. 1947	Jan. 1947	Dec. 1947	Jan. 1947	Dec. 1947	Jan. 1947	Dec. 1947	Jan. 1947	Dec. 1947	Jan. 1947
Allentown	-3	-3	-2	+16	-77	+5	-57	+3	+1	+32
Altoona	-2	-11	0	+4	-67	+774	-61	+3	-9	+3
Harrisburg	0	-1	+2	+18	-87	+10	-53	+14	-7	+18
Johnstown	0	+5	+8	+32	-43	-68	-58	+16	-7	+18
Lancaster	0	+1	-1	+18	-29	-10	-55	+10	-10	0
Philadelphia	-2	-1	-3	+8	-31	+35	-53	+8	-9	+1
Reading	+1	-5	+2	+19	+78	+97	-54	+10	-3	+9
Scranton	-3	+4	-1	+19	-24	-76	-60	+9	-8	-7
Trenton	.....	.....	.....	.....	+28	+41	-61	+16	-12	+11
Wilkes-Barre	-1	-8	+2	+10	-75	+39	-57	+14	0	+23
Williamsport	+1	-12	+4	+3	-72	-58	.....	.....	-4	-2
Wilmington	-1	-4	-3	+6	+37	+331	-57	+7	-28	+2
York	0	-3	-2	+3	-69	-59	-58	+2	-11	+5

\* Area not restricted to the corporate limits of cities given here.

## Summary Estimates—January 1948

	Employment	Weekly Pay Rolls	Weekly Man-Hours Worked
All manufacturing	1,113,600	\$55,422,000	44,566,000
Durable goods industries	631,100	34,693,000	25,582,000
Nondurable goods industries	482,600	20,729,000	18,984,000

## Changes in Major Industry Groups

Indexes (1939 average = 100)	Employment		Pay Rolls			
	Jan. 1948 In-dex	Per cent change from Dec. 1947	Jan. 1948 In-dex	Per cent change from Dec. 1947		
					Jan. 1947	Jan. 1947
All manufacturing	130	-1	0	288	-1	+13
Durable goods industries	156	-1	-1	330	-1	+15
Nondurable goods industries	106	-1	0	237	-2	+11
Food	127	-3	0	229	-8	+5
Tobacco	105	0	+3	231	-3	+5
Textiles	86	-1	0	213	-1	+15
Apparel	95	-1	+3	243	0	+14
Lumber	92	+1	+1	198	+2	+17
Furniture and lumber products	102	-2	-2	244	+2	+10
Paper	121	-1	0	261	-2	+15
Printing and publishing	138	-1	+3	271	+2	+11
Chemicals	122	-1	-2	247	-1	+9
Petroleum and coal products	149	+1	+6	276	-1	+15
Rubber	162	0	-13	326	-2	-11
Leather	98	+1	+2	208	+3	+12
Stone, clay and glass	134	-1	-4	281	-1	+10
Iron and steel	139	0	0	292	+1	+19
Nonferrous metals	147	-3	-13	295	-4	-6
Machinery (excl. elect.)	210	-1	+7	442	0	+22
Electrical machinery	234	0	-1	503	0	+18
Transportation equip. (excl. auto)	215	-3	-14	397	-8	-7
Automobiles and equipment	182	-3	-2	379	-4	+9
Other manufacturing	135	-1	-6	262	-3	+1

## Average Earnings and Working Time

	Weekly Earnings		Hourly Earnings		Weekly Hours	
	Average	Ch'ge	Average	Ch'ge	Average	Ch'ge
All manufacturing	\$49.77	+14	1.244	+13	40.0	+1
Durable goods indus.	54.98	+16	1.356	+13	40.5	+3
Nondurable goods industries	42.95	+10	1.092	+12	39.3	-2
Food	40.34	+5	1.012	+10	39.9	-4
Tobacco	29.09	+2	.748	+1	38.9	-1
Textiles	44.47	+16	1.118	+19	39.8	+2
Apparel	36.17	+11	.945	+9	38.3	+2
Lumber	40.05	+16	.973	+9	41.2	+6
Furniture and lumber products	43.90	+13	1.000	+11	43.9	+2
Paper	46.61	+14	1.052	+12	44.3	+2
Printing and pub.	55.54	+7	1.451	+13	38.3	-5
Chemicals	48.31	+11	1.190	+12	40.6	-1
Petroleum and coal products	56.40	+9	1.455	+10	38.8	-1
Rubber	49.98	+2	1.328	+8	37.6	-5
Leather	36.46	+10	.975	+11	37.4	-1
Stone, clay and glass	48.04	+14	1.184	+12	40.6	+2
Iron and steel	56.65	+19	1.413	+14	40.1	+4
Nonferrous metals	52.26	+8	1.304	+10	40.1	-1
Machinery (excl. electrical)	53.28	+15	1.299	+10	41.0	+4
Electrical machinery	60.10	+19	1.481	+16	40.6	+3
Transportation equip. (excl. auto)	56.42	+8	1.425	+7	39.6	+2
Automobiles and equip.	57.19	+11	1.346	+11	42.5	0
Other manufacturing	40.63	+8	1.072	+10	37.9	-2

## Distribution and Prices

Wholesale trade Unadjusted for seasonal variation	Per cent change	
	Jan. 1948 from	
	Month ago	Year ago
<b>Sales</b>		
Total of all lines	-11	+ 3
Drugs	- 5	+ 1
Dry goods	- 4	- 7
Electrical supplies	-44	-11
Groceries	+13	+15
Hardware	-41	+ 2
Jewelry	-62	- 9
Paper	-28	-12
<b>Inventories</b>		
Total of all lines	+ 4	+12
Dry goods	+ 9	+ 3
Electrical supplies	- 2	+ 5
Groceries	0	- 6
Hardware	+13	+41
Paper	+ 5	+56

Source: U. S. Department of Commerce.

Prices	Jan. 1948	Per cent change from		
		Month ago	Year ago	Aug. 1939
<b>Basic commodities</b> (Aug. 1939 = 100)	350	- 1	+15	+250
Wholesale (1926 = 100)				
100	166	+ 2	+17	+121
Farm	199	+ 1	+21	+227
Food	180	+ 1	+15	+168
Other	148	+ 2	+16	+ 85
<b>Living costs (1935-1939 = 100)</b>				
United States	169	+ 1	+10	+ 71
Philadelphia	168	+ 1	+11	+ 72
Food	206	+ 2	+14	+121
Clothing	189	+ 1	+ 7	+ 90
Fuels	135	+ 4	+ 7	+ 40
Housefurnishings	191	- 1	+ 6	+ 90
Other	142	+ 1	+ 7	+ 41

Source: U. S. Bureau of Labor Statistics.

Indexes: 1935-1939 = 100	Adjusted for seasonal variation					Not adjusted		
	Jan. 1948	Dec. 1947	Jan. 1947	Per cent change		Jan. 1948	Dec. 1947	Jan. 1947
				Month ago	Year ago			
<b>RETAIL TRADE</b>								
<b>Sales</b>								
Department stores—District Philadelphia	268p 240	284 260	248r 221	- 6 - 8	+ 8 + 8	204p 192	460 421	188 177
Women's apparel	249	270r	235	- 8	+ 6	204	387	193
Men's apparel	183	246	168r	-25	+ 9	191	450	174
Shoe	217p	247r	211	-12	+ 3	169p	293r	165
Furniture	.....	.....	.....	-49*	+ 2*	.....	.....	.....
<b>Inventories</b>								
Department stores—District Philadelphia	243p 214	245 230	217r 196	0 - 7	+ 12 + 9	212p 190	208 196	189r 174
Women's apparel	248	228r	256	+ 9	- 3	208	201r	215
Shoe	140p	142	116	- 2	+ 20	121p	128	101
Furniture	.....	.....	.....	+ 4*	+ 12*	.....	.....	.....
<b>FREIGHT-CAR LOADINGS</b>								
<b>Total</b>	132	138	142	- 4	- 7	125	133	135
Merchandise and miscellaneous	129	133	138	- 3	- 6	120	127	128
Merchandise—l.c.l.	77	81	95	- 5	- 19	73	80	89
Coal	132	143	144	- 8	- 8	148	154	161
Ore	153	165	168	- 8	- 9	58	83	64
Coke	173	191	163	-10	+ 6	199	207	188
Forest products	87	90	107	- 3	-19	70	76	86
Grain and products	129	122	157	+ 6	-18	125	127	152
Livestock	85	86	122	- 2	- 30	86	93	123
<b>MISCELLANEOUS</b>								
Life insurance sales	221	201	203	+10	+ 8	210	217	193
Business liquidations								
Number	.....	.....	.....	+ 8*	+146*	60	37	16
Amount of liabilities	.....	.....	.....	-45*	+ 60*	44	117	40
Check payments	243	223	236	+ 9	+ 3	241	268	233

\* Computed from unadjusted data. p Preliminary. r Revised.

## BANKING STATISTICS

### MEMBER BANK RESERVES AND RELATED FACTORS

Reporting member banks (Millions \$)	Feb. 25 1948	Changes in —	
		Four wks.	One year
<b>Assets</b>			
Commercial loans	518	+ 4	+ 87
Loans to brokers, etc.	18	- 5	- 4
Other loans to carry secur.	13	.....	.....
Loans on real estate	73	- 2	+ 3
Loans to banks	7	+ 6	+ 4
Other loans	244	+ 8	+ 46
<b>Total</b>	873	+11	+129
Government securities	1,391	-23	-127
Other securities	261	- 6	+ 2
<b>Total investments</b>	1,652	-29	-125
<b>Total loans &amp; invest.</b>	2,525	-18	+ 4
Reserve with F. R. Bank	495	-13	+ 29
Cash in vault	43	.....	+ 2
Balances with other bks.	105	.....	+ 7
Other assets—net	56	+ 2	+ 3
<b>Liabilities</b>			
Demand dep. adjusted	2,111	-35	+133
Time deposits	399	+16	- 24
U. S. Gov. Deposits	42	+ 8	- 66
Interbank deposits	337	+ 9	+ 9
Borrowings	9	- 9	- 5
Other liabilities	26	- 1	.....
Capital account	300	+ 1	- 2

Third Federal Reserve District (Millions of dollars)	Changes in weeks ended				Ch'ges in four weeks
	Feb. 4	Feb. 11	Feb. 18	Feb. 25	
<b>Sources of funds:</b>					
Reserve Bank credit extended in district	+ 11	+ 5	+ 14	- 44	- 14
Commercial transfers (chiefly interdistrict)	+ 4	+ 58	+ 22	+ 50	+126
Treasury operations	- 9	- 68	- 43	- 13	-133
<b>Total</b>	- 2	- 5	- 7	- 7	- 21
<b>Uses of funds:</b>					
Currency demand	.....	+ 14	- 6	+ 3	+ 11
Member bank reserve deposits	- 2	- 20	+ 1	- 10	- 31
"Other deposits" at Reserve Bank	.....	+ 1	- 2	.....	- 1
Other Federal Reserve accounts	.....	.....	.....	.....	.....
<b>Total</b>	- 2	- 5	- 7	- 7	- 21

Member bank reserves (Daily averages; dollar figures in millions)	Held	Re- quir'd	Ex- cess	Ratio of Excess to Re- quired
1947 Feb. 1-15	\$412	\$407	\$ 5	1%
1948 Jan. 1-15	451	436	15	3
Jan. 16-31	443	434	9	2
Feb. 1-15	429	426	3	1
<b>Country banks</b>				
1947 Feb. 1-15	\$375	\$330	\$ 45	14%
1948 Jan. 1-15	402	351	51	15
Jan. 16-31	392	346	46	13
Feb. 1-15	387	344	43	13

Federal Reserve Bank of Phila. (Dollar figures in millions)	Feb. 25, 1948	Changes in—	
		Four weeks	One year
Discounts & advances	\$ 18.2	\$+ 4.0	\$- 1.3
Industrial loans	0.9	- 0.4	- 0.1
U. S. securities	1,502.5	- 68.1	-229.4
<b>Total</b>	\$1,521.6	\$- 64.5	\$- 230.8
Fed. Res. notes	\$1,645.8	\$+ 2.6	\$- 16.7
Member bank dep.	811.0	- 31.7	+ 26.5
U. S. general acct.	147.7	+ 72.5	- 34.0
Foreign deposits	30.4	+ 2.5	- 8.0
Other deposits	1.4	- 0.8	- 0.9
Gold cert. reserves	1,119.6	+126.0	+197.3
Reserve ratio	42.5%	+4.2%	+7.9%