

WHAT FOUR YEARS OF WAR HAVE COST

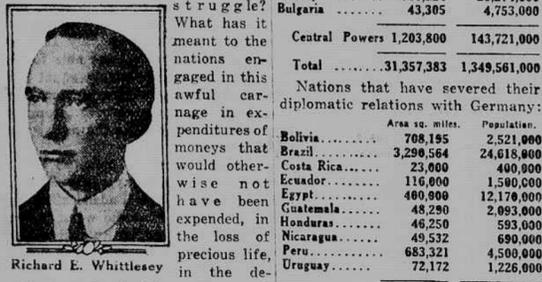


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Expert Statistician Gives Astounding Figures on Money Actually Spent

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AS the fourth year of the greatest war in history is drawing to a close, the question arises once more: What has the war cost the world thus far? What have been the economic changes wrought by this unprecedented struggle?



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What has it meant to the nations engaged in this awful carnage in expenditures of money that would otherwise not have been expended, in the loss of precious life, in the destruction of valuable property and territory, in the curtailment of economic production, in the interruption of commerce and trade, and, finally, in moral effects upon the European race that cannot be estimated at all in terms of dollars and cents?

To treat fully and adequately of the problems suggested here is, of course, impossible in the brief space at our disposal and at the present state of affairs, when most of the important information and figures, particularly those pertaining to the Central Powers, are withheld under the restriction of censorship. As to the smaller nations, information is almost entirely lacking. In consequence, scarcely more can be here attempted than to give a bird's-eye view of the effects, both negative and positive, brought about by the war and of the conditions the world will have to face after its conclusion, basing such a view on figures and information from the best available sources.

Briefest mention of the resources as well as the incumbrances of the chief belligerents prior to the outbreak of the war will aid materially toward a better appreciation of the new situation.

Total belligerents	Area sq. miles	Population
United States	3,774,658	103,600,000
Great Britain (entire empire)	13,153,712	434,287,000
France	207,054	39,602,000
Italy	110,632	36,546,000
Russia	8,417,118	171,060,000
Belgium	11,373	7,571,000
Serbia	33,891	4,548,000
Rumania	55,489	7,508,000
Portugal	35,490	5,958,000
Japan	260,738	55,968,000
China	3,913,560	320,620,000
Greece	46,522	5,000,000
Libria	41,000	2,000,000
Panama	49,532	387,000
Cuba	44,164	2,406,000
Siam	195,000	8,149,000

Money Expenditures Of Principal Fighters

The money expended by the seven leading belligerents for purely war purposes during the four years has been estimated at about \$134,000,000,000. The enormous magnitude of this sum is beyond all comprehension and can be grasped only in terms of comparison with other wars. It has been said that this sum is greater than all combined money expenditures for all other wars since the beginning of recorded history. The total cost of all the wars fought since the American Revolution, the aggregate fighting period covering sixty years, was only \$23,000,000,000, making the expenditures of the present war for only four years six times greater. It is about one-third of the total national wealth of the chief belligerents. The combined

mensurations as to stagger the human mind and shake the very foundations of civilization.

Destruction and Other Losses

Besides these staggering costs there have been appalling military destructions in the invaded areas from which it will require enormous efforts of human energy to recuperate, and some of which are irreparable. The total area of the war zone is 174,000 square miles, of which the western theatre of the war, in France and Belgium, stretches over an area of 19,500 square miles and contains over 3,000 cities, villages and hamlets, great manufacturing and agricultural districts, of

which some have been totally annihilated and some heavily affected. The estimate by the National Foreign Trade Council of the war losses, which, unfortunately, does not go beyond 1916, is as follows:

Area (square miles)	Population	Wealth (1914)	Man power	Men in arms	Men killed	Men disabled
30,153,583	1,205,840,000	\$406,000,000,000	88,000,000	33,000,000	4,342,000	3,189,000

But the greatest and most irreparable loss entailed by the war is, of course, the loss of human life. It is the greatest because life is a priceless thing, and no value can be set upon it. Still in economics, as in all other sciences, in treating of man emotional considerations are set aside and a purely economic value in terms of money has been placed upon the individual, based upon his potential productive power. Thus M. Barriol, the celebrated actuary, gives the following figures as the capital value of man: In the United States, \$4,100; in Great Britain, \$4,140; in Germany, \$3,380; in France, \$2,900; in Russia, \$2,020; in Austria-Hungary, \$2,020, or an average capital value for the five foreign nations of \$2,892.

The number of men already lost, as is seen from the accompanying table, is 8,509,000 killed and 7,175,000 permanently wounded, or a total of 15,684,000. This society has been impoverished through the death and permanent disability of a part

Economic Waste and Loss in Life and Property Reach Enormous Total

to society's income, stream of goods and services.

This loss of man power is also partly offset by the large contingents of women drawn into industry. In England, out of a female population of 23,000,000, about 6,000,000 were engaged before the outbreak of the war in gainful occupations. Since the war broke out no less than 1,500,000 women have been added to the ranks of wage earners, an increase of fully 25 per cent. Moreover about 400,000 women have shifted from non-essential occupations to men's work. In the United States approximately 1,266,000 women are now engaged in industrial work, either directly or indirectly necessary to carry on the war.

After-War Conditions—Peace Budget

There is no parallel in history to the strain which will be placed upon the international financial system during and after the conclusion of this stupendous conflict. In the last year of peace, 1913, the combined budgets of the seven principal belligerents was about \$7,000,000,000. That amount was for the upkeep of the governments, the maintenance of armies and navies, and for interest on existing debts. Of course it is uncertain just what will be the measures the various governments will take in meeting their fiscal burdens after the war, but in comparison with the budgets that the governments will be called upon to furnish after the war the foregoing sum is a modest figure indeed. Assuming that the war will continue another year at the present rate of expenditure, under the existing conditions, in estimating the peace budget the following facts must be taken into consideration: The charges on the incurred debt and the enormous amounts of pensions which will have to be paid to millions of soldiers' families; the running expenses of the governments are bound to increase materially with the extension of governmental functions which have become a feature of the war; the expenditures for armies and navies may also increase appreciably above those of 1913, in the event that the war, contrary to the earnest hope of the Allies, does not destroy militarism. It is therefore no exaggeration to say that the size of budgets probably will be trebled.

It must be clearly recognized that the increase in the peace budgets as compared with the pre-war budgets will be a very serious fiscal problem for the various countries at the end of the war. However, it is evident that within certain limits these increases will be mainly nominal. Those countries which under pressure of necessity have issued such large amounts of paper currency that it has depreciated in purchasing power will not readily go back to a specie basis, and thus the tendency will be to maintain the present level of prices, in so far as currency inflation has been the generating cause of the present level. Thus, while the absolute amount of the budgets has increased, it is clear that with prices continuing on a high level the national income would tend to increase correspondingly. In so far as the interest on the debt is payable in the money of the country, i. e., mainly internal debt, the expenditures of the budgets as a whole would be paid in the current money of the country. This would

tend to decrease the relative burden of the apparent increase of the budgets. When we come to the consideration of the physical and moral effects of the war upon the race, then all calculations in terms of figures become impossible, and here cases the field of the statistician. For who can estimate, or even describe, the untold suffering, the unspeakable tragedy of millions upon millions of men, women and children the world over? The moral strain to which the nations have been subjected, the "shock" which has reacted upon the population at home as well as upon the soldiers on the battlefield, the undernourishment and starvation of children as well as adults, have resulted in a lowered vitality, the ill effects of which, especially in the countries of the Central Powers, are already seen in an increase of the death rate, and in a spread of epidemics and diseases that have taxed the medical resources of all countries. The lowered vitality of the race, which is still further aggravated by the millions of incapacitated soldiers and the premature and excessive employment of children and women in the industries, will eventually make for a lower standard of efficiency in all human activities, or a retardation of human progress. Authoritative statements are to the effect that in Belgium, in the earlier period of the war, the deaths of women and children far outnumbered those of men. Annual deaths among the German civilian population have increased by a million over the normal. Besides the loss in actual population there is a loss of potential population. Carefully compiled figures show that by 1919 the population of Germany will be 7,500,000 less than it would have been under ordinary circumstances. The people in Austria in 1919 will be 8 per cent fewer in numbers than in the year before the war. Hungary will be still worse off; it will have a population 9 per cent lower than in pre-war days. The problem of population is one that causes grave concern in all other countries as well. From the very start of the war efforts were made by the various belligerents—Great Britain, Turkey, as well as Austria and Germany—to guard against a falling birth rate by offering special inducements to marriage before leaving for the front, which means leaving widows to bear children under great nervous stress and with probable heritage of weakness and misery. Such children will hardly be happy children, as many of them will never see their fathers, nor will they enjoy a normal home life. Grave dangers to society lurk in the lack of parental control and education which is incidental to war. Thousands of children, released from parental supervision and denied the benefit of fatherly advice and admonition, have been tempted into the paths of crime from which they may never come back. Millions of children have been deprived of the possibility of acquiring even a rudimentary education. Hundreds of thousands of students of the high schools, colleges and universities have been compelled to desert the

The Greatest War in History

The Forces Involved

	Allies	Central Powers	Total
Area (square miles)	30,153,583	1,203,800	31,357,383
Population	1,205,840,000	143,721,000	1,349,561,000
Wealth (1914)	\$406,000,000,000	\$105,000,000,000	\$511,000,000,000
Man power	88,000,000	31,000,000	119,000,000
Men in arms	33,000,000	20,000,000	53,000,000
Men killed	4,342,000	2,667,000	7,009,000
Men disabled	3,189,000	1,936,000	5,129,000

The Cost in Dollars

	Allies	Central Powers	Total
National budgets	\$86,000,000,000	\$48,000,000,000	\$134,000,000,000
Shipping destroyed	1,050,000,000		1,050,000,000
Men lost	21,000,000,000	14,000,000,000	35,000,000,000

Indirect Losses

- Inflation of currency and increased prices.
- Business development checked and business machinery wrecked.
- Property damaged by under maintenance or idleness.
- Industry crippled by diversion of men and (in U. S.) lack of immigration.
- Production diverted from creative to destructive purposes.
- Death rate increased and race vitality lowered.
- Birth rate decreased.
- Lack of education for children and for youthful soldiers.
- Physical suffering.
- Moral degradation.

average daily war cost, computed on a four-year basis, is about \$107,500,000, or \$4,479,000 each hour of the day.

War cost—4-yr. basis, Aug. 1914—Aug. 1918, 44.37 basis.	Daily cost on 1913 basis.
United States \$8,000,000,000	17,500,000
Great Britain 27,000,000,000	18,500,000
France 21,500,000,000	14,500,000
Italy 8,500,000,000	7,500,000
Russia 21,000,000,000	17,500,000
Allies \$86,000,000,000	\$75,500,000
Germany \$35,000,000,000	\$23,000,000
Austria-Hungary 13,000,000,000	9,000,000
Central Powers \$48,000,000,000	\$32,000,000
Totals \$134,000,000,000	\$107,500,000

After deducting pre-war budget and advances to the Allies, this could not be done for the Central Powers. These terrific expenditures have already entailed a debt for these nations six times greater than was their total debt prior to the war, representing the enormous sum of \$120,000,000,000. It has taken the belligerent nations one hundred years to accumulate the debt of \$23,560,000,000, which only four years of war have multiplied by six. Allotted among the several nations the national debt in round numbers stands as follows:

United States	Great Britain	France	Italy	Russia	Total, Allies	Germany	Austria-Hungary	Total, Central Powers
\$210,000,000,000	\$83,000,000,000	\$60,000,000,000	\$13,000,000,000	\$40,000,000,000	\$406,000,000,000	\$74,000,000,000	\$31,000,000,000	\$105,000,000,000

which some have been totally annihilated and some heavily affected. The estimate by the National Foreign Trade Council of the war losses, which, unfortunately, does not go beyond 1916, is as follows: Destruction of buildings and industrial machinery in Belgium, 51,000,000,000, and in France, 700,000,000,000. The destruction of agricultural buildings and implements, of raw materials, of crops and livestock, has been estimated at a sum of \$780,000,000 in Belgium and \$680,000,000 in France. Roads were destroyed frequently by the retiring troops and have been seriously damaged by heavy gunfire and excessive use. The losses from destruction of railway bridges, etc., have been estimated in Belgium at \$275,000,000, in France at \$300,000,000.

In the eastern theatre of the war Germany has been invaded only in eastern Prussia, where the agricultural population has been seriously impaired. Heavy damage was inflicted upon bridges, roads and governmental property, including railroads. The direct costs to Germany through the loss of agricultural products, of manufacturing products, as well as in interest on investments abroad, of earnings from shipping and banking houses, and profits of insurance and mercantile houses engaged in business abroad have been considerable. Her loss of property abroad alone has been estimated by Prof. Ballod at \$2,500,000,000. In the movements of Russian, German, Austrian and Italian armies havoc has been worked over a widely extended area. In the large parts of Austria-Hungary that have been occupied by Russia are mines of coal, iron, lead and zinc, which suffered heavily. Villages were levelled, agricultural property and machinery, oil fields, mines, rail-

estimated at 15,000,000 tons. This is almost one-third of the world's 48,500,000 tons of pre-war shipping; the cost of the lost tonnage at pre-war value is estimated at \$1,050,000,000.

Another element in the war's indirect costs is found in the fact that owing to increased prices of materials and labor, together with the pressure for immediate production, some business organizations have postponed normal expenditures for maintenance of equipment and stocks of materials. Under-maintenance is the using up of productive agents without adequate replacement. It can go to great lengths in some cases before immediate production falls off in consequence. The extent of under-maintenance due to the war has not been determined. It is checked to some degree by the operation of excess profits taxes in this and other countries.

Incidendiaries and explosions in American munition factories, so frequent in the earlier stages of the war, caused by the pernicious activity in this country of German and Austrian agents, have also added an item looming large among the war losses. Of the \$250,000,000 fire losses in 1917, about \$43,558,000 is estimated as probably due to enemy incendiaries.

Building operations, because of the high prices of material and labor, are about 20 per cent less in value than before the war. Perhaps here should also be entered the item of loss to the United States resulting from a shortage of labor, due to the greatly reduced immigration and to the large number of immigrants that have been called upon by their respective governments to fight for their native countries.

of its productive man power to the extent of \$45,000,000,000.

Men enlisted	Killed to date	Permanently wounded to date
United States 2,000,000	5,000	6,000
Great Britain 7,500,000	307,500	231,000
France 6,000,000	1,282,500	551,000
Italy 2,500,000	157,000	110,000
Russia 14,000,000	2,250,000	1,719,000
Belgium		
Serbia		
Rumania		
Turkey		
Portugal		
Allies 33,000,000	4,342,000	3,189,000
Germany 10,500,000	1,327,500	953,000
Austria-Hungary 7,000,000	1,077,000	799,000
Turkey 2,500,000	262,500	184,000
Bulgaria		
Central Powers 20,000,000	2,667,000	1,936,000
Total 53,000,000	7,009,000	5,129,000
Estimate for 1917-1918	1,560,000	2,000,000
Totals 8,509,000	7,175,000	

The loss of men, measured in terms of the capital value of the workers withdrawn from industry, is offset in some degree by the enhancement of the capital value of the remaining producers. A reduction in labor supply relative to a fixed or increased demand adds to the value of the supply per unit—an application of the familiar principle of scarcity value. This has reference solely to the values which may be expressed in dollars. It should not obscure the inevitable reduction in the productive labor force of the belligerent nations. Conceivably four men may have a combined capital value after the war greater than the pre-war value of five similar men, but this will not enable them to do the work of five men. The real man power cost of the war is not the loss of the capital value represented by those who die prematurely, but rather the loss of their contribution