# **Economic Impact**

The Spanish flu outbreak of 1918 had far reaching economic effects. Offices, theatres, businesses were shut down, to contain the outbreak. Important fact worth noting is that males aged 18 to 40 were highly affected, and had serious economic impact, both in the businesses and factories they worked for, and also for their own families.

Important thing to understand, in case of trying to assess the economic situation in those days is that, there is not adequate data for those times. Economic data is highly lacking.

## In United States of America

The Spanish flu pandemic had killed almost 675,000 people in the United States (nearly 0.8 percent of the 1910 population). In 1918 and 1919, the USA was highly involved in the war (World War I). Although the pandemic outbreak occurred almost 100 years ago, lessons from it can have high relevance even in today's world. The high involvement of USA towards the end of the war meant large troop movements. These men lived very close to each other, and often proper hygiene was not practiced in wartime. These men (mainly aged 18-40) thus became highly susceptible to flu infection. The was cost the government a lot, large part of the national budget was being spent in war. The US, already burdened with the war was ill-prepared for the pandemic outbreak.

Also, worth noting is that, the healthcare measures must be ensured to remain in action during in health crisis. Even if good healthcare measures are in place, if the pandemic knocks out the provisions, then it does no good.

For example, in Philadelphia during 1918, the city healthcare system was overwhelmed by the number of cases. In the data given ahead, it can also be seen that Philadelphia had a mortality rate of 932.5 (per 100,000 people), which is among the highest in the data. In Philadelphia during the 1918 pandemic, "the city morgue had as many as ten times as many bodies as coffins."

As, stated earlier the lack of data makes understanding the economic situation very hard. But in a 2007 research paper by Thomas A. Garrett, Federal Reserve Bank of St. Louis; "Economic Effects of the 1918 Influenza Pandemic", he has tried to understand the effects from newspaper articles of that time.

For example, "Influenza Crippling Memphis Industries." *The Commercial Appeal*, Oct. 5, 1918, page 7.

Industrial plants are running at limited capacity. Out of a total of about 400 men in the transportation department of the Memphis Street Railway, 124 men were incapacitated the day before due to the pandemic. This led to limitations on the Street Railway service. The Cumberland Telephone Co. reported that more than 100 operators were absent from duty.

The telephone company hence asked that unnecessary calls be eliminated.

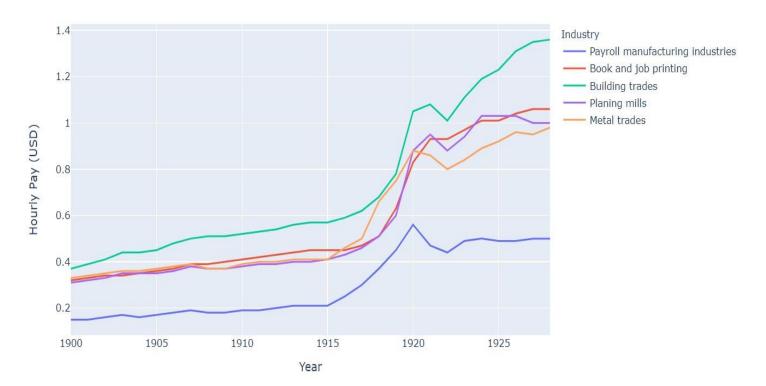
City	1910 Population	1915 Mortality rate	1918 Mortality rate	1919 Mortality rate	Ratio of 1918 and 1915 rates
Birmingham, Alabama	1,32,685	158.1	843.6	319.1	5.3
Los Angeles, California	3,19,198	87.4	484.5	186.8	5.5
Oakland, California	1,50,174	98.6	496.6	238.2	5.0
San Francisco, California	4,16,912	130.6	647.7	283.3	5.0
Denver, Colorado	2,13,381	184.8	727.7	228.5	3.9
Bridgeport, Connecticut	1,02,054	206.0	825.4	272.3	4.0
New Haven, Connecticut	1,33,605	207.9	768.0	212.3	3.7
Washington, D.C.	3,31,069	189.8	758.8	225.9	4.0
Atlanta, Georgia	1,54,839	165.7	478.4	291.4	2.9
Chicago, Illinois	21,85,283	172.7	516.6	191.5	3.0
Indianapolis, Indiana	2,33,650	146.7	459.4	240.6	3.1
New Orleans, Louisiana	3,39,075	245.8	768.6	333.7	3.1
Baltimore, Maryland	5,58,485	207.1	836.5	230.6	4.0
Boston, Massachusetts	6,70,585	214.6	844.7	256.3	3.9
Cambridge, Massachusetts	1,04,839	157.3	676.5	180.0	4.3
Fall River, Massachusetts	1,19,295	213.5	799.7	216.8	3.7
Lowell, Massachusetts	1,06,294	191.3	696.1	198.4	3.6
Worcester, Massachusetts	1,45,986	188.9	727.1	248.9	3.8
Detroit, Michigan	4,65,766	148.1	413.4	242.4	2.8
Grand Rapids, Michigan	1,12,571	100.0	282.7	93.8	2.8
Minneapolis, Minnesota	3,01,408	121.6	387.7	169.4	3.2
St. Paul, Minnesota	2,14,744	127.8	480.6	145.9	3.8
Kansas City, Missouri	2,48,381	176.1	718.1	301.1	4.1
St. Louis, Missouri	6,87,029	156.7	536.5	202.3	3.4
Omaha, Nebraska	1,24,096	150.9	660.8	191.8	4.4
Jersey City, New Jersey	2,67,779	211.2	756.6	317.0	3.6
Newark, New Jersey	3,47,469	146.6	680.4	213.3	4.6
Paterson, New Jersey	1,25,600	159.4	683.6	235.7	4.3
Albany, New York	1,00,253	187.1	679.1	244.8	3.6
Buffalo, New York	4,23,715	168.7	637.5	206.2	3.8
New York, New York	47,66,883	212.1	582.5	265.8	2.7
Rochester, New York	2,18,149	121.8	522.7	152.8	4.3
Syracuse, New York	1,37,249	120.5	704.6	155.9	5.8
Cincinnati, Ohio	3,53,591	163.4	605.4	253.2	3.7
Cleveland, Ohio	5,60,663	155.1	590.9	260.5	3.8
Columbus, Ohio	1,81,511	136.5	451.9	213.5	3.3
Dayton, Ohio	1,16,577	142.7	525.2	154.6	3.7
Toledo, Ohio	1,68,497	126.8	401.0	181.9	3.2
Portland, Oregon	2,07,214	69.6	448.2	246.4	6.4
Philadelphia, Pennsylvania	15,49,008	189.2	932.5	222.9	4.9
Pittsburgh, Pennsylvania	5,33,905	260.1	1243.6	431.8	4.8
Scranton, Pennsylvania	1,29,867	223.7	985.7	247.5	4.4
Providence, Rhode Island	2,24,326	191.4	737.4	253.3	3.9
Memphis, Tennessee	1,31,105	179.3	666.1	340.6	3.7
Nashville, Tennessee	1,10,364	179.9	910.2	301.0	5.1
Richmond, Virginia	1,27,628	209.9	661.0	269.5	3.1
Seattle, Washington	2,37,194	74.7	425.5	189.8	5.7
Spokane, Washington	1,04,402	91.9	487.4	210.7	5.3
Milwaukee, Wisconsin	3,73,857	158.9	474.1	187.7	3.0

This data is from "Garrett, Thomas A. Pandemic Economics: The 1918 Influenza and Its Modern-Day Implications." The rate is per 100,000 people.

The data shows the population and mortality rates of select US cities. The population from the 1910 census, the 1915, 1918 and 1919 mortality rates are given. The mortality rate is given per 100,000 people. The data suggests that influenza mortalities in U.S. cities during the pandemic were three to five times higher, on an average, than during a non-pandemic year (1915). This highly crippled the financial and economic machinery in the US cities. Almost all large industrial and financial centers were hit. Manufacturing, construction, iron and steel, automobile industries were highly impacted. The pharmaceutical and medical supplies industry were the only industries that thrived at that time.

Influenza mortalities had a direct impact on the worker wages in the US industries. It is based on a simple economic model; large number of deaths in the age group of 18-40 in males led to decrease in number of workers for the industrial sector. This reduced the labor supply, thus increasing the marginal product of labor and capital per worker and led to increased wages. In fact, data also supports this assumption.

## USA Pay over time



(Data published on Statista by Aaron O'Neill, Mar 17, 2020)

There was already a demand for labor in US, as due to the war many men were drafted into the armed forces. And after the pandemic outbreak of 1918, the demand and pay rate also increased. Let us try to understand this labor hourly pay data.

## Payroll manufacturing industries.

Manufacturing is one industry that holds a high proportion of unionized labor. Manufacturing pay scales usually come with different pay cycles as well for workers, and this can make payroll administration for manufacturing quite challenging. Here it relates to the manufacturing sector working as workers working in assembly work, machine operation, packaging, shipping, or supervising. This indicates that this sector had high need of labor and hence an increase in hourly wages.

## **Book and job printing**

Job Printing is printing that uses display type and no more than a sheet or two of paper. Short as that definition is, it encompasses a world of paper items—tickets, letterheads, notices, invoices, vouchers, coupons, cards, labels, posters, receipts, and timetables, to name only a very few. Book Printing refers to the mainstream printing industry.

### **Building trades**

Related to the building and construction industry, trades (as carpentry, bricklaying, plumbing) that are essential to and chiefly practiced in connection with building construction. This sector saw a high increase in the hourly wages, indicating a large increase in demand in this sector.

## **Planing mills**

Related to the timber and woodwork industry, a planing mill is a facility that takes cut and seasoned boards from a sawmill and turns them into finished dimensional lumber.

#### **Metal trades**

Related to the metal industry. Jobs like blacksmith, foundry workers, metal mine workers, Steel erector, Welder, Boilermaker and so on.

## What we can understand.

The influenza pandemic caused a lot of economic and financial problems for the United States. Coupled with wartime expenditure, this led to various issues in those times. Businesses in entertainment and service sectors faced huge losses. Businesses in the healthcare industry experienced an increase in revenue.

Urban areas and cities, with most of the business and offices were highly affected by the flu, with death rates increase to many times of death rates. These lead to breakdown in the civil infrastructure of the cities and caused economic and financial problems.

Overall, it hampered the economic growth and led to closure of many businesses and firms. Labor hourly pay rates increased due to increase in demand.