This week marks the hundredth anniversary of the beginning of World War I. On June 28, 1914, Austrian Archduke Franz Ferdinand was assassinated in Sarajevo. This event led to a month of failed diplomatic maneuvering between Austria-Hungary, Germany, France, Russia, and Britain which ended with the onset of the Great War, as it was originally called. Austria-Hungary declared war on Serbia on July 28, causing Germany and Russia to mobilize their armies on July 30. When Russia offered to negotiate rather than demobilize their army, Germany declared war on Russia on August 1. Germany declared war on France on August 3, and when Germany attacked Belgium on August 4, England declared war on Germany. Europe was at war, and millions would die in the battles that followed.

The impact on global stock markets was immediate: the closure of every major European exchange and many of the exchanges outside of Europe. Although no one would have predicted this result at the beginning of July 1914, by the end of the month, European stock exchanges were making preparations for the inevitable war and its impact. Never before had all of Europe’s major exchanges closed simultaneously, but then again, never had such a global cataclysm struck the world. There had been crises before when the stock market in the United

States or other countries had closed, such as the 1848 Revolution in France, or the Panic of 1873 in New York, but never had all the world's major stock markets closed simultaneously.

Open Financial Markets Led to Closed Exchanges

Ironically, it was because of the openness of global financial markets before the war that the global closure of stock markets occurred. At the beginning of 1914, capital was free to flow from one country to another without hindrance. All the major countries of the world were on the Gold Standard, and differences in exchange rates were arbitraged through the buying and selling of international bonds listed on the world's stock exchanges. A country such as Russia would issue a bond that was listed on the stock exchanges in London, New York, Paris, Berlin, Amsterdam and St. Petersburg. Differences in exchange rates between countries could be arbitraged by buying and selling bonds in different markets. In effect, this made European stock exchanges a single, integrated market. In 1914, currency flowed between countries with lightning speed. During the Napoleonic wars, money could only move as quickly as a ship could venture from one country to another. By 1914, cables stretched across the oceans of the world, and money as well as stock orders could be wired telegraphically from one corner of the world to another in minutes. Traders throughout the world could sell bonds and shares instantly, and it was the fear of massive selling, and the impact this would have on global markets that led to the shutdown of European exchanges. There was a concern that investors would try to repatriate their money leading to massive selling, a sharp fall in prices, and large amounts of capital flowing out of one country and into another. The impact of selling on brokers and jobbers was exacerbated by the way shares were traded on the London Stock Exchange. Individual trades were made on a daily basis, then carried until Settlement Day when trades were matched and crossed. Brokers would make up the surplus or deficit on their accounts by settling outstanding trades with cash. As long as there were no significant swings in stock or bond prices, brokers had sufficient capital to settle their accounts. However, since traders relied on credit, large swings in prices could and would bankrupt many of the brokers, worsening the financial panic. To avoid this problem, stock markets were closed until a solution could be found.

The War Drives Stock Prices Down

Of course, to investors not being able to buy or sell shares is even worse than selling them at a loss. Although stocks could not be traded on the main exchanges, over-the-counter markets replaced exchanges for those who were desperate enough to sell. Although the NYSE was closed between July 30 and December 12 of 1914, stocks were quoted by brokers and traded off the exchange. Global Financial Data has gone back and collected stock prices during the closure of the NYSE to recreate the Dow Jones Industrial Average while the NYSE was closed. We collected the data for the 20 stocks in the new DJIA 20 Industrials and calculated the average of the bid and ask prices from August 24, 1914 to December 12, 1914. This enabled us to discover that the 1914 bottom for stocks actually occurred on November 2, 1914 when the DJIA hit 49.07, over a month before the NYSE reopened. Few people realize that stocks in the US had already bottomed out and were heading into a new bull market when the NYSE reopened on December 12, 1914. The DJIA did not revisit this level until the Great Depression in 1932. The graph below shows how the Dow Jones Industrial Average behaved during 1914, including the period of the NYSE's closure. Although the market declined with the onset of war, investors eventually realized that war in Europe would bring opportunities to American companies to sell industrial goods and war materiel. Once this fact settled in, the stock market rose steadily for the next year.

The NYSE reopened trading for bonds under restrictions on November 28th; the San Francisco Stock and Bond Exchange reopened on December 1st; and the NYSE resumed trading at pegged prices on December 12th, though the prospect of war profits soon made these restrictions irrelevant. As the graph below shows, the Dow Jones Industrial Average almost doubled in price in the year following its bottom in November 1914. The market paused, then had another rally into 1916 before falling back once investors realized the strong profits they had predicted from the war would not be realized.

The Closure of European Exchanges

In Europe, the problem of preventing catastrophic declines in stock prices was solved by putting a floor on share prices. Initially, stocks and bonds were not allowed to trade below the price they had been trading at on July 31, 1914. The government also placed restrictions on capital, limiting or preventing large flows of capital out of the country for the remainder of the war. With these restrictions in place, markets reopened in Europe. The London Times began printing stock prices for London and Bordeaux on September 19th and for Paris on December 8, 1914. In January 1915, all shares were allowed to trade on the London Stock Exchange, though with price restrictions. The St. Petersburg exchange reopened in 1917 only to close two months later due to the Russian Revolution. The Berlin Stock Exchange did not reopen until December 1917.

Unlike the United States, stocks on the London Stock Exchange declined in price during World War I. This was due not only to the decline in earnings that occurred and general selling of shares to raise capital, but just as importantly, because of the lack of new buying and the shift of capital to government war debt. British companies were allowed to issue new shares only if the issue was in the national interest, and foreign governments and companies were not allowed to issue any new shares. The British government wanted to insure that all available capital was used to fund the growing war debt. Most of the new bonds that listed on the London Stock Exchange were British government bonds and their share of the London Stock Exchange's capitalization rose from 9% to 33% during the war. The performance of the London Stock Exchange between 1913 and 1919 is shown below. As can be seen, stocks lost value continually during the war, hitting their bottom only in 1918, despite the general inflation that occurred in Britain during the war, which normally would have carried prices upwards.

The Long-Term Impact of World War I

World War I destroyed the global integration of capital markets. The Gold Standard never returned despite attempts after the war to revive it. The system of issuing bonds and shares internationally failed to recover from the war, and stock exchanges listed fewer international shares. The ownership of stocks and bonds from other countries shrank dramatically.

Exchanges were subjected to extensive regulation that did not exist prior to the war. Germans were not even allowed to trade on the London Stock Exchange for years after the war was over. London lost its place as the center of global finance during the war as its role as the center of global finance was passed on to New York. Nevertheless, New York was never able to take on the pivotal role in capital markets that London held prior to World War I. After the war was over, financial markets had to deal with the dislocations created by the war: inflation, increased government debt, reparation payments, the Russian Revolution, the creation of new countries, England's failed attempt to return to the Gold Standard, the stock market crash of 1929, the Great Depression, debt defaults, competitive devaluations, the concentration of gold in France and the United States and a hundred other financial repercussions that resulted from World War I. Governments and stock exchanges did learn their lessons from World War I. When World War II began, the London Stock Exchange closed for only a week, and the New York Stock Exchange never closed during World War II, save for August 15-16, 1945 when the NYSE closed to recognize V-J Day and the end of WWII. The Berlin Stock Exchange remained open during World War II, though price floors and capital restrictions kept the prices of shares from falling until the devaluation of 1948. Although global stock markets reopened between 1914 and 1917, it wasn't until the 1980s that the restrictions on financial markets that prevented the free flow of capital that had existed before 1914 were removed. Only after the fall of Communism did stock markets become as globally integrated as they had been before 1914. Though the focus of the hundredth anniversary of World War I will be on the massive destruction of World War I, the deaths of millions, and how World War I laid the foundations for World War II, the impact on stock markets and international finance should never be forgotten.