

The Economic Impact of September 11th

Chapter Objectives

After reading this chapter you should be able to

Understand that the economy was in recession prior to September 11, 2001

Understand how economists figure the estimates of expenses related to the attacks on New York City's World Trade Center buildings and Washington's Pentagon.

Understand that the immediate impact of the attacks included a dramatic drop in consumer confidence, as well as a significant fall in the stock market.

Understand the economic logic of closing stock markets when events such as this occur.

Understand that the economy rebounded quickly as a result of fiscal and monetary policies taken in response to the economic crisis caused by the attacks on the World Trade Center buildings.

Alan Jackson "Where were you when the world stopped turning" Drive, 2002

To your parents and grandparents the question that begins "Where were you when..." would always end with "when Kennedy was shot," or "when the Japanese bombed Pearl Harbor." To you, though, the question can only end "when the World Trade Center was hit." The attacks on New York and Washington and the downing of the commercial airliner in Pennsylvania changed the U.S. in many ways. This chapter focuses on the economic impact of the events of September 11th, 2001.¹

We begin by looking at the economy prior to September 11th so as to put the attacks in an economic context. You will see that the attacks did not cause the recession of 2001 but merely made a bad situation worse. We will discuss the direct and indirect costs of the attack and will note that the way economists measure things, the demolition and eventual rebuilding of the buildings is measured, perversely, as a gain in GDP rather than a loss. We will also see that the costs of the attack include much more than the

¹ The production schedule for a this textbook was such that though you are reading this sometime in the Fall of 2002 or later, no new chapters could have been added after the attacks.

simple value of the buildings that were felled and the planes and lives that were lost. The indirect costs are substantial as we spend billions on myriad security systems in hopes of preventing future attacks.

We will note that this attack can be modeled as an aggregate-demand shock and show how economists knew that the attacks would deepen the recession. We will use our aggregate demand - aggregate supply model and will note that after closing for the remainder of the week, stock markets lost between 15 and 20 percent of their value in a few days.

We will explain the economic rationale for closing stock markets when crises like 9/11 occur. Finally, we will discuss the policy options that were available to the President, Congress and the Federal Reserve to combat the crisis, and we will note how the automobile sector created its own stimulus plan.

The Economy on September 10th.

As you may recall from Chapter 11, Fiscal Policy, economists do not tell us when a recession started or ended until well after it happens. Shortly after the attacks of September 11th economists from the National Bureau for Economic Research announced that as of March, 2001, the economy was in recession. This was the earliest that they had “called” a recession since they began this service but the thinking was clear. How could they go wrong? All measures of economic activity indicated that the third quarter of 2001 was going to produce negative real GDP numbers prior to September 11th, so the attacks would likely deepen the downturn. Further, they predicted the downturn would last into at least the fourth quarter. Indeed when the third quarter numbers were released real GDP had contracted.

The reasons for the contraction were many. The single biggest culprit was business, which had evidenced the rapid declines in investment and inventories that had accounted for almost the entire decline. Another precipitating event was the confused Presidential election outcome of 2000. The rapid slowing of the economy corresponded

generally to the time when America spent a month wondering who its next President would be. On the other hand, because of seven interest rate cuts by the Federal Reserve in 2001, consumers kept on spending. The low interest rates kept mortgage and auto loan rates attractive.

Estimating The Economic Impact of the Attacks

Osama Bin-Laden's al-Qaeda operatives claim that the damage inflicted by their attacks on the US total more than \$1 trillion. While that figure is hard to justify, true damage estimates are nonetheless, difficult to construct. In order to tally up the damage you have to begin with the costs associated with the demolition and the ensuing clean-up of WTC and Pentagon debris. Later you have to add the costs of rebuilding the affected portion of the Pentagon, and replacing the WTC commercial and transportation facilities. What must also be included is the lost income earning potential of the more than 3,000 victims. You cannot stop there. The war on terrorism, and the ancillary increases approved in defense spending because of that war have added nearly \$100 billion annually to the federal budget.

There are other costs that you must include as well: any and all other money that you would have to spend because of the attacks that you would not have had to spend had the attacks not occurred. When that is complete you have to add the money that could have been earned that might not now be earned. Thus when survivors seek counseling because of their trauma; when we all demand greater security at airports, large sporting events and other potential targets; or, whenever we forgo an opportunity to travel because of the risk that we feel is present, these expenses must be included among all the other economic impacts of the attacks.

Starting at the top, the World Trade Center and the adjacent buildings were insured for \$4 billion. The damage to the Pentagon cost another billion to repair. Next the four planes were worth between \$50 million and \$100 million each. These are costs

related to the direct damages that resulted from the attacks but they are by no means either the only costs or the only damages.

There was income lost as a result of these buildings being attacked. Those in the WTC and surrounding buildings that did not perish, did not produce goods and services for several days as their employers sought new facilities in which to operate. Many of the people and companies housed in the WTC towers were engaged in offering financial services. Insurance estimates on these losses accounted for by goods and services that were not provided total another \$10 billion. While many of them received some form of compensation, either from employers or from organizations like the Red Cross, this came from the pockets of donors, stockholders or taxpayers. Total insurance estimates of the cost of the New York attacks total between \$25 billion and \$30 billion.

In economic terms, accounting for the loss for of those that died is somewhat more difficult, depending as it does on estimating the value in money that a victim would have been worth over his or her entire projected lifetime. Economists have little trouble coming up with a dollar figure that we can justify, but it is clear that saying that the life of Mary the secretary was worth \$750,000 and that of Sally the investment banker was worth \$3.6 million raises controversy.

A first pass at estimating what was lost to the economy as a result of the deaths of 3,000 people is to establish the present value of their future earnings. These were highly trained and highly paid people. If you assume that the average person killed earned \$75,000 in salary and benefits, was 40 years old, and had a life expectancy of 35 years, then such a calculation would have each person worth approximately \$1.7 million. With 3,000 dead that comes to a little over \$5 billion.

In addition to what we've presented so far there is the lost production of those 100,000 or more New York residents who would have been producing goods and services in the weeks following the attacks that but were not because their bosses were attempting to find new office space. This includes the inhabitants of the World Trade Center itself as

well as the people who worked in surrounding buildings that had to be evacuated because of the damage done to them

Now consider the losses outside of New York and Washington that must be associated with the attacks. Airlines in particular were hard hit. The resulting drop in passenger flights led them to lay off more than 100,000 employees. Nationwide, in all sectors of the economy from mid-September through the end of 2001, new filings for unemployment insurance increased from just over 300,000 per week to nearly 650,000 per week.

All of the preceding are clearly costs to society, but in what will appear to be quite contradictory, GDP accounting will score some of these losses as economic positives. The money to engage in tearing down the damaged buildings and to start rebuilding of New York WTC site and Washington's Pentagon came from two main sources. The federal government put forward \$40 billion for this effort and insurance companies were responsible for another \$25 billion. The resulting increase in government spending will likely have a positive impact on GDP and because the insurance companies footing this bill were mostly foreign rather than domestic--while the demolition and rebuilding efforts occurred in the U.S.--this, too, had the effect of boosting GDP.

Increases in military spending, government spending on internal security, and the increase in spending on airport security will also lead to increases in GDP. Of course, none of this is likely to make us better off than we were on September 10th. We only hope that by spending this extra money we will be as secure today as we thought we were on September 10th. Spending more to accomplish the same thing boosts reported GDP but does not make us better off.

Modeling the Economic Impact of The Attacks

If you have studied Chapter 11, Fiscal Policy, you are familiar with what economists call aggregate-demand shocks. If you have, let us remind you that aggregate-demand shocks are unexpected events that change aggregate demand. Clearly the attacks

of September 11th qualified as “shocks” under any definition. Retail sales during the week of September 11th were dramatically lower than they otherwise would have been. This, and a variety of other indices of consumer confidence all took very serious hits in the fall of 2001. Complicating things further, business confidence, which is typically measured by looking at businesses’ hiring, layoff, and investment plans, was also adversely affected by the aftermath of the attacks. These effects in combination created the clearest example of an aggregate-demand shock in decades. Figure 1 shows the impact of these shocks on the aggregate demand-aggregate supply model. Lower aggregate demand reduces equilibrium, real gross domestic product, and overall prices.

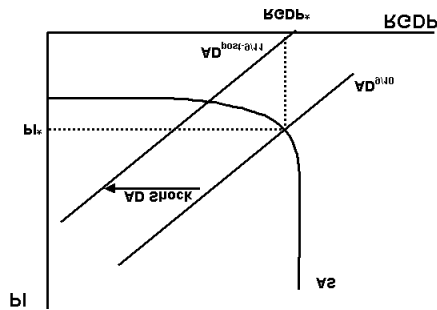


Figure The Post-9/11 Aggregate Demand Shock

The attacks reduced consumer and business confidence causing aggregate demand to decrease. Such a decrease causes lower equilibrium output and prices and a recession ensues.

Government Responses to the Attacks

In the immediate aftermath of the attacks, the government closed airports and stock markets. While closing the airports was an obvious response because of the nature of the attacks, reasons for closing the stock markets, and particularly stock markets not in the financial district of New York were not so obvious. Other government responses,

such as quick Congressional action on President Bush's requests for emergency spending, action by the Federal Reserve to cut interest rates and to insure that banks were able to meet depositors' demands for cash in a timely fashion were key to dampening the potentially devastating financial impact of the attacks.

Taking these actions in the order in which they occurred, within minutes of the attacks the stock markets in New York's financial district were closed. Shortly thereafter, stock markets in Philadelphia, Chicago, and San Francisco were also closed. The exchanges themselves took this action but the Securities and Exchange Commission continued the closure until Monday of the next week. Why would closing a stock market be a good idea? One reason is based in the truism that financial markets are based on confidence. If you are confident that you will get your principal and a return when you want it, you are willing to accept a relatively low interest rate when you lend it out. You'll remember that Chapter 41 explained that stock prices are fundamentally the present value of expected future earnings.

When stock markets are rocked by an event such as the September 11th attacks or a Presidential assassination, confidence wanes and the willingness of stockholders to accept low returns on their investments diminishes rapidly. Furthermore, when information is sketchy about what the future holds, people want to cash-out, i.e., take their assets out in cash, long enough for clarity to come back. If everyone tries to cash-out at the same time then stock markets can plummet. The idea behind closing markets is that it may be in everyone's mutual interest to wait until the cloud of uncertainty clears some. When the stock market did open the next week, it took a beating. The major stock indices lost between 15% and 18% of their value in that week. Apparently a significant drop, it was actually viewed positively because investors were perceived simply to be factoring in lower profit expectations, rather than to be reacting out of fear.

The day the markets opened the Federal Reserve cut interest rates by one-half of a point. In the weeks following September 11th interest rates were cut an additional 1.25

points to their lowest point in 40 years. This was not the most important aspect of the Fed's post-9/11 calming role. When the banks opened on September 17, 2001, the Fed stood ready to provide cash to any bank seeking to satisfy nervous depositors. Had the Fed allowed a bank to look shaky during that time it could have set off panicked withdrawals across the country. You have probably seen a "run on a bank" in an old movie or two. Not a pretty sight.

In other attempts to instill or maintain confidence in the soundness of the economy, President Bush and Congress reacted quite quickly on a number of key pieces of legislation that served to stabilize matters. The Emergency spending bills for repairs to the Pentagon and aid to New York were passed within a week that provided a total of \$40 billion. All told the federal government's resulting ten percent increase in fourth quarter government spending had an important stimulating effect.

It was a happy coincidence that yet another action by the government stimulated the economy at just the right time. Earlier in the summer Congress had passed a retroactive tax cut to January 1, 2001, and had decided to advance that money to taxpayers in the late summer rather than having them wait until April, 2002, to file for it. Checks began arriving in mailboxes in the late summer and early fall of 2001. These checks, typically worth between \$300 and \$600, made their way into the economy at precisely the right time.

The effects of the ways the economy was stimulated that have just been presented can also be modeled in the aggregate supply-aggregate demand diagram. Figure 2 combines all of these impacts. The fortuitous tax cuts and the spending increases are Fiscal Policy (FP) and the dramatic interest rate cuts are Monetary Policy (MP) These combine to increase aggregate demand.

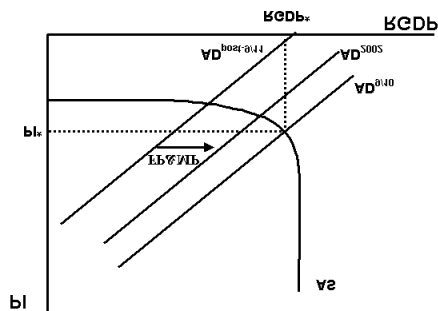


Figure Fiscal and Monetary Policy Actions After 9/11

The pre-9/11 tax cuts, the government spending increases and the interest rate cuts all served to bring aggregate demand back and the recession, if it happened at all, was short-lived

Corporate Reactions to the Attacks

There were several actions by corporate America to the attacks of September 11th that are worthy of note. Fearing that it was on the edge of a recession prior to the attacks, corporate America was nervous about the upcoming Christmas season anyway. In response to the attacks, dramatic price reductions were the order of the day. The most notable of these was the reaction of the automobile industry. Within days of the attacks the executives of the major U.S. auto manufactures were meeting in Washington with the President and with the Chairman of the Federal Reserve, Alan Greenspan, to plot how to get through this rocky period. The result of those meetings was lower interest rates generally and dramatically more favorable automobile financing arrangements. Several manufacturers introduced 0% financing deals. Because these 0% car loans were for short loan periods and required exemplary credit, fewer than one-third of the cars sold during the time when these arrangements were available were at 0%. On the other hand, other arrangements were in place for the other customers and bank loans were quite favorable as well. As a result, auto sales from October, 2001, to February, 2002, were quite brisk.

Conclusion

While the economic impacts of the attacks on the U.S. on September 11, 2001, are still being felt, the detriment to the U.S. economy has not been particularly noteworthy. The recession of 2001 would have occurred with or without the attacks and the rebound from it was neither delayed nor severely hampered by it.