# Unit 10: Fiscal Policy, Governmen t Budget, and Debt

Keynesian theory offered an explanation of how The Great Depression could happen, a recommendation for how policy could end it, and how government policy could prevent future recessions. Despite the attractiveness of such a theory and despite it's widespread (but not universal) acceptance in the economics profession at the time (things are different today), politicians did not take to Keynes's policy recommendations. However in 1939 the developing World War II caused the U.S. government to adopt, in effect, Keynes's policy budget recommendations.

Keynes had recommended that government undertake a temporary, massive spending program financed by borrowing, not taxes, as a way to end The Great Depression and return to full employment. The massive military build-up begun in 1939 and continuing through 1945 constituted exactly such a massive spending program. And government financed the military build-up with borrowing instead of taxes. In effect, the U.S. government had finally adopted the Keynesian recommendations and on a scale equal to the severity of The Great Depression. In fairness, it should be noted that John Maynard Keynes was a committed pacifist and increased spending on education, welfare, and infrastructure was his first choice, not military spending. Nonetheless, Keynesian fiscal policy was being given a "test". It succeeded. The economy <u>immediately</u> returned to full employment. Real GDP boomed and returned to pre-1929 levels. The Great Depression was over. Once the War was ended in 1945, most economists and political policy-makers had become convinced that the Keynesian theory explained the economy. More importantly, the Keynesian fiscal policy became the preferred government policy as returning soldiers feared they would face a return to depression-conditions. The Classical era of small, laissez-faire governments with balanced budgets was over.

In this unit, we will explore how the adoption of fiscal policy by government has worked out. One of the most significant results of government adoption of Keynesian fiscal policy since 1939 has been frequent budget deficits and a mounting government debt. So, in this unit, we have these main objectives:

- Explain the federal budget process, surplus/deficit, the public debt, and their impact on the economy.
- Understand the funding process for Social Security and prospects for the future.

## Track Record of Keynesian Fiscal Policy: Did It Work?

Although ideology undoubtedly plays some role in economic policy making, the ultimate test of any macroeconomic theory should be: *Does it work?* Do the policies recommended by the theory help us achieve our four macro economic goals? For example, the Classical theory, while it offers some insights and some valuable lessons, clearly failed in The Great Depression. Classical theory suggested such a prolonged, severe recession couldn't happen, yet it did. Classical theory suggested the government was powerless to end high unemployment, that only lower wages and prices would end unemployment, and that government deficits would worsen the depression. Yet, 4 years of declining wages and prices (1929-1933) only made unemployment worse and government deficits, once tried on a large scale in WWII, rapidly eliminated unemployment – all contrary to Classical theory. So what about Keynesian theory and Keynesian fiscal policy? Has it worked?

The verdict on Keynesian fiscal policies is a qualified "yes". Yes, in general, Keynesian fiscal policies have worked and have succeeded but there are difficulties at times. I will briefly try to recap the history and track record of Keynesian fiscal policies in the U.S. since the end of World War II.

In 1948, three years after the end of World War II, the U.S. government passed a law called the *Full Employment Act of 1948*. In effect, this law officially adopted the Keynesian theory for the federal government. It states that the U.S. government should adopt a budget each year with the intent of ensuring that the nation achieves full employment. Since the adoption of this law, there have been more than 10 "official" recessions (two consecutive quarters of declining real GDP) and numerous other shorter periods of weak economic growth. The average recession since 1948 has lasted 8-9 months and has typically been relatively mild. Prior to 2007, the worst post-war recession was in 1982 when unemployment rate reached in excess of 10%.

## Keynesian Success Stories

### *Keynesian fiscal policy has definitely succeeded in three important respects.*

First,it has enabled the government to keep recessions and other negative economic events from “spinning out of control” and turning into a repeat of The Great Depression. For example, in October 1987 the stock market crashed as severely as it had in 1929. Yet, a mix of sound economic policymaking (both fiscal and monetary) prevented the 1987 crash from starting a recession-depression in the way the 1929 crash did. Again, in 1989-90 a massive wave of bank failures swept the U.S. as Savings & Loan banks failed (see a later unit on banking). Unlike 1932 when a similar massive wave of bank failures swept the U.S., Keynesian policies helped prevent this negative event from turning into a serious recession.

We have most recently seen this effect in 2007-2009. When a long recession became severe in the fall of 2008 as Wall Street encountered a financial crisis, all economic indicators began to flash “red”. From September 2008 until March 2009, the economy began a rapid decline. Graphs of the major indicators, real GDP, unemployment, employment, etc, all showed the economy beginning to retrace the beginning of the Great Depression. Indeed some indicators showed an economy deteriorating faster than it did in 1929-1930. President Obama and the Congress passed a large stimulus bill in Feb. 2009 that began to take effect in March 2009. The decline slowed. By late spring 2009, the economy had stopped declining. Another Great Depression was averted. Unfortunately, the stimulus program enacted was only 1/2 the size that Keynesian economists recommended. Further, more of the stimulus was oriented towards tax cuts (40% of the total) and not increased spending. As Keynesian theory tells us, tax cuts as a stimulus measure are less effective than direct spending since households save part of the tax cut. In 2009, most households that received tax cuts used them to pay off debt (a form of saving) instead of spending. Overall, the Keynesian stimulus effect was therefore only about 1/3 what was needed. The result was that the decline was stopped, but the stimulus was inadequate to re-start the economy on a growth path. A depression stopped, but not enough for recovery. *As we’ll see in this unit, the 2007-2009 experience reveals both the effectiveness (it did stop the decline) and weakness (politicians often don’t follow the recommendations) of Keynesian fiscal policy*.

Second, while not eliminating recessions completely, Keynesian fiscal policy has clearly resulted in milder recessions and quicker recoveries. Of the post-WWII recessions, two were clearly created by Classical theory-style supply shocks (shifts in SRAS): 1974 and 1980. The 2007-2009 was caused by a financial crisis that dramatically reduced aggregate demand. The remaining recessions were largely the result of decisions by the central bank (The Federal Reserve) to slow down lending and spending. That means that all except maybe the 1974 and 1980 recessions were created by shifts in Aggregate Demand such as Keynes had foreseen. It should be noted that the financial crisis and its effects in 2007-09 was described by Keynes in The General Theory, although it was left out of “mainstream Keynesian theory” as taught after WWII. Post-Keynesian theorists clearly foresaw the financial crisis and it’s impact. In every case since WWII, the policies followed by the government in the recession and subsequent recovery were consistent with what Keynesian policy would recommend. Even the Reagan policies of the 1980’s, despite political claims that they were not Keynesian, had effects that are predicted by Keynesian theory. And, in every case except the most recent, the recession was relatively short and mild compared to recessions and depressions before World War II.

> Jim’s Note: Some politicians have claimed to not be Keynesian. For example, the Reagan administration in the 1980’s advocated what they called supply-side policies and criticized “Keynesians”. However, the reality of the fiscal budgets adopted during the Reagan administration in response to the 1980 and 1982 recessions was essentially the same as what Keynesian theory recommended. As President Richard Nixon observed in 1971, “we are all Keynesians now”. Thoroughout the period 1946-present, U.S. budget policy has been consistently Keynesian-oriented, regardless of the labels Presidents have chosen to adopt. When the economy goes into a recession, politicians become Keynesian, even if they won’t admit it. Usually the disputes end up being about whether to use tax cuts as stimulus or increased spending.

Finally, the most important success of Keynesian fiscal policies has been the introduction of what are called ***automatic stabilizers***. Automatic stabilizers are government programs or policies that have the effect of automatically countering recessionary forces when the economy begins to slow. Automatic stabilizers are important both at the macro economic level and at the personal, micro-economic level in helping people deal with a slowing economy. We will discuss automatic stabilizers in more detail below.

## Keynesian Failures and Controversies

"Failure" is always relative to expectations. The initial successes of Keynesian fiscal policies in the 1950's and 1960's led many economists and policy-makers to raise their expectations of just how much Keynesian fiscal policy could do to achieve macroeconomic goals. Keynes's book originally intended to outline policies that could be used to avoid really huge disasters such as The Great Depression. Keynes himself did not expect that the business cycle could be entirely eliminated.  He aimed to dampen the cycles, make them milder and less frequent, and to prevent the start of long depressions. But the very mild recessions of the 1950's and 1960's, the strong GDP growth in that era, and the invention of computers and computerized econometric models led many economists and policy-makers to believe that that government could manage and fine-tune the economy.  In the 1960's government came to believe that fiscal policies could increase growth rates forever, do away with the business cycle completely, and permanently achieve full employment. Such a view, alas, was hubris. Fiscal policy is indeed an effective tool, but it is a blunt, heavy tool.

Since the early 1970's, there has been a significant anti-Keynesian movement. Among economists it started with the University of Chicago. (Harvard and MIT were the homes of leading Keynesians). Among politicians, many Republicans have claimed to be anti-Keynesian, although policies in office are often Keynesian. Some criticisms of Keynesian fiscal policies are ideological. If you are against *all* government, then of course, you are against the use of fiscal policy. The critics tried to resurrect (and largely succeeded by the 1980's) Classical theory with criticisms that Keynes ignored the workings of the central banks in the depression. We will study the monetary system in the next unit. Some criticisms of Keynesian fiscal policy are actually reactions to the hype and raised expectations of being able to fine-tune the economy. Keynesian fiscal policy cannot fine-tune the economy to eliminate the private-sector business cycle. Nor can Keynesian fiscal policy raise real growth rates beyond the ability of aggregate supply to increase. It can, however, prevent recessions from lasting long or from being severe.  Perhaps more importantly, Keynesian automatic stabilizers can make recessions milder and less likely to spiral into a depression.

One of the major reasons that fiscal policy is a "blunt" policy tool and isn't suitable for fine-tuning or making small adjustments to the macroeconomy is because of the existence of ***lags***. A lag is the time delay between when the economy needs a change in fiscal policy and when the new fiscal policy takes effect. One lesson of the past 60 years is that lags can be large and unpredictable for fiscal policy. We will discuss lags more below.

## Deficits and Debt

In the period 1948-1970, Keynesian policies were relatively uncontroversial with politician from both major parties supporting them, although there was a small vocal minority of economists opposed to them. Since the 1980's, though, government deficits have become quite controversial because of their effects on government debt.

First, let's remember that a deficit is a *flow* measure – it measures the amount by which government spending (and transfers) exceed tax collections for a particular year. It starts over at zero at the beginning of each fiscal year.  Debt, on the other hand, is a *stock* measure of the government's total indebtedness. In a private household or a firm, a deficit for the year must be financed. It must be paid for either by reducing/selling off some already existing asset (think withdrawing money from your bank account) or by borrowing. If a *private* deficit is financed by borrowing, then the deficit adds to the debt. When a household or firm saves money, it in effect runs a surplus and reduces its debt. Debt is the accumulated past borrowing minus whatever has already been paid off.

Keynesian policies generally lead to persistent government deficits as an attempt to maintain full employment.  In

Keynesian policy, the size of the deficit should be dictated by unemployment. If the the economy is at full employment, then no or very little deficit is needed. If the economy has significant unemployment, then a larger deficit is needed. But if a government follows Keynesian policies to maintain full employment, how should it finance the necessary deficits?

## Does the Government Have a Budget Constraint?

Whether government can successfully run deficits year-after-year, depends in large part on the structure and arrangements of the financial/monetary sector of the economy (a topic for Part III of the course). In recent years there has been an enormous amount of debate in the U.S. about whether the government can run deficits and how much debt it can support. Much of this debate is based upon a totally false analogy. It's an analogy that politicians and bankers love to perpetuate (often unknowingly). Households and firms face a hard budget constraint. If they spend more than their income, they must sell assets or borrow to finance the extra spending. ***The analogy that government is "just like a household or firm" and needs to balance it's budget or that there are limits to government borrowing is FALSE.*** Government, or at least a national government that issues its own currency, does not face a hard budget constraint. A national (not state or Euro-zone) government has options that you, I, households, and firms don't have.

A national currency-issuing government might face a voluntary budget constraint, but it has options. One of the most important options or powers that a national government has is the ability to issue currency or bank reserves to pay things. on the government finances those deficits. If a national currency-issuing government, like the U.S., Japan, UK, Canada, Australia, Brazil, etc., wants to run a deficit, it can.There are no inherent financial reasons why it can't. Further, it has a choice. Such a government can borrow (issue bonds) to raise cash or it can just go ahead and spend the money by creating bank reserves in the banking system. Many people refer to this as "printing money" but while it could be "printing money", it isn't necessarily so. Nor is it necessarily a bad thing, particularly if it produces a larger GDP and higher employment. In the U.S., the government years ago voluntarily agreed to always borrow to finance deficits. It did this when it created The Federal Reserve system and gave the power to manage monetary policy to private banks. There is no economic or inherent financial reason for this voluntary constraint. It is purely political.

## The real limits to deficits – capacity to produce

While there is no *financial* limit on government deficits (or debt), there is indeed a ***real limit***. Basically, government deficits add to GDP spending. Remember that C + I + G = GDP (ignoring the Rest-of-World for the moment). And remember that GDP must be produced from resources such as labor. So if a government runs a deficit that adds too much to C+I+G, it runs the risk of the increasing aggregate demand (shifting AD to the right) beyond the capacity of the economy to produce (LRAS). That's a real limit. It's the limit of available real resources to meet demand from households, firms, and government. So can a government run larger deficits and add to it's debt? It depends. If there's significant unemployment, then yes. If the economy is not at full employment, then there are unused resources (unemployed workers) in the economy available to meet the extra demand that results from a larger deficit. If the economy is at full employment, then it's time to talk about cutting deficits.

## Fiscal Policy Concepts & Issues

## Fiscal Policy and the "Multiplier"

One of the reasons fiscal policy is attractive is because of the multiplier. The multiplier refers to the idea that government need only make a small change in fiscal policy because it's effect will be multiplied and trigger a much large change in the overall economy. For example, suppose the economy is in a recessionary gap. Further let's suppose that actual GDP is $500 billion below the level of GDP that would result in full employment. Keynesian analysis says that aggregate demand (AD) should be increased by $500 billion. The multiplier suggests that the increase in G, government spending, need not be as large as the full $500 billion. If the multiplier is 2.0, then the government could increase G (or cut T) by $250 billion. This initial fiscal policy stimulus of $250 billion in more spending will ultimately be multiplied and result in a full $500 billion increase in total aggregate spending.

The reason government fiscal stimulus gets multiplied is because of the circular flow of goods. Let's say initially the government decides to stimulate the economy by buying $250 billion worth of goods. The firms producing these goods receive the $250 billion. They then pay their employees and shareholders wages and profits. The employees and shareholders find their incomes have risen, so they then increase their household spending. C eventually increases as well as G. This increase in C from households then gets spent with other firms, who then pay their employees, who then raise their spending. Eventually the cycle of increases will stop because in each cycle households save a part of their increased income and spend part. We have an immediate impact of $250 more GDP as government spending pays for that much production. But then we get a second "cycle" as people spend their increased income from the government spending. Of course, people don't spend all of their increase in income (if your Income goes up $100, you are likely to save part and spend the rest). As people increase their personal spending in reaction to the initially increased incomes, it pays for more GDP, and more income, and more spending, etc.

This multiplier effect makes fiscal policy very attractive because it magnifies the impact of any particular government fiscal policy change.

## Multiplier: Increased Spending or Decreased Taxes for Stimulus?

An expansionary fiscal policy can, of course, be implemented by either cutting taxes or by increasing government spending. Expansionary fiscal policy (stimulus) depends on increasing the government deficit (reducing surplus if already in surplus). Does it make a difference which is used, tax cuts or spending? Yes, to a limited degree. *The multiplier effect of an increase in spending will be greater than the multiplier effect of a cut in taxes.* Why? The reason is very simple. Suppose the government has a balanced budget to begin with and decides it needs to create a deficit and stimulate an expansion of the economy. In AD-AS terms, what the government wants to do is increase AD, shift it to the right. Suppose the government decides that it should borrow $100 billion and run a $100 billion deficit. Should it cut taxes by $100 billion and keep spending the same? Or should it keep taxes the same and increase spending $100 billion? If the government increases spending (G), then the full initial $100 billion adds to AD and then gets multiplied through the circular flow. But, if the government chooses to cut taxes instead, then the $100 billion goes into households pockets immediately as income. Households will likely save part of this tax savings and put into the bank. They will spend only part of the tax cut, not the full tax cut. Thus the initial increase in AD will be less than $100 billion, depending on what portion households decide to save.

Theory clearly predicts that spending-driven fiscal policy will be more powerful than tax-cut drive fiscal policy. But offsetting the more powerful effects of spending over tax cuts is speed of implementation and ideology/politics about spending.

Keynesian theory only tells us that increased government spending would help reduce or eliminate a recession. It doesn't tell us *on what to spend the money*! Keynes himself was clear that the initial economic impact could be had even if the spending was on silly or useless activities. Nonetheless he argued that it would be wiser in the long run to do the increased spending in areas that increase long-run aggregate supply – things like infrastructure, education, and health. In practice, it can be difficult to get agreement on government spending priorities. Individual members of Congress may want spending in their district regardless of whether that's where the greatest need is. Congress may disagree about how to spend the money, even if they agree on how much. Keynesian policies work best when government is functional and goal-oriented, not dysfunctional.

## Lags: How Fast Can the Government Respond?

Offsetting the higher multiplier for spending-based fiscal policy is the fact that spending-based policy has even greater lags than tax-based policy. ***A lag is the reaction time it takes for fiscal policy to take effect.*** Because fiscal policy involves government budget decisions, there can be very large lags involved. Indeed, often the lags are so large that the fiscal policy will have it's greatest impact long after it's needed. Consider the following hypothetical example of an economy that slips into a recession beginning in January of year 1.

| | Event | Comment | Type of Lag |
|---|---|---|---|
| January ’01 | Economy slips into recession – real GDP begins to decline | Real GDP has begun to decline – but it is not known yet since GDP data is only published quarterly. | Data Lag |
| April ’01 | 1st qtr GDP figures are released showing the first decline | Not really a “recession” yet since it’s only 1 quarter of decline. Policymakers take wait-and-see attitude | |
| July-Aug ’01 | 2nd qtr GDP figures are released showing the 6 months of delining GDP | Policymakers now realize that a recession is happening. | |
| Sep’01 | White House proposes fiscal policy actions to stimulate the economy: a mix of tax cuts and spending increases. WH sends bill to Congress. | This is optimistic. In real-life it may take policymakers longer to craft a specific proposal to Congress. | Planning Lag |
| Oct-Dec. ’01 | Congress debates proposed spending and tax cut bill. Finally passes law changing the budget. | This is highly optimistic. Typically it takes 6-12 months to get a bill and budget through Congress. | Response Lag |
| Jan-April ’02 | Govt agencies begin to implement the budget. Treasury prepares tax rebate checks and spending agencies request bids for new spending. | The fastest action would be to mail out tax rebate checks. This can be done in 2-3 months. Spending takes 12 months to actually spend. | Implementation Lag |
| May-Sept. ’02 | Economy receives initial impact of stimulus and starts the multiplier process. | Economy takes another 3-6 months to complete the multiplier process and gain the full benefit of the fiscal policy stimulus. | Multiplier Lag |

As you can see, it is entirely possible that it would take 20 months or even longer from the beginning of a recession until the full stimulus effect of an expansionary fiscal policy is felt. Since most recessions are only 8-9 months long (not the most recent), they are over and the economy has begun to grow before policy makers can respond and change the government budget! Indeed, it’s probable that in a short recession, by the time the expansionary policy takes effect, it will be exactly the wrong policy. It will stimulate and already expanding economy!  This will make the policy pro-cyclical, making the business cycle worse, and not counter-cyclical, which makes the business cycle milder.

Even if Congress and the President can agree rapidly on how much to spend and on what to spend, the government may be handicapped in being able to spend the stimulus money fast enough.  It may sound odd, but it’s not easy to spend a few hundred billion dollars. Requests for proposals (RFP) have to be written, plans developed, bidding done, contracts written and signed, and then the actual work has to be done before the government can pay the money. In the 2009 debate about the stimulus bill, there was much talk among politicians about “shovel-ready” projects – projects where the plans already existed and all we needed was authorization to get going rapidly.

## Automatic Stabilizers vs. Discretionary, Active Policy

The scenario described above, where the economy goes into recession and the government actively decides to change fiscal policy to correct it, is called ***active or discretionary policy.*** All active or discretionary policy changes require an act of Congress in the U.S. since only Congress can authorize changes to the budget. This makes for a slow response and large lags. There is an alternative.

The alternative is called ***automatic stabilizers.*** Automatic stabilizers are government programs, laws, and policies that change government spending and tax collections *automatically* as the economy changes, without needing a specific act of Congress to change the budget. A simple example is the Unemployment Compensation program. Congress long ago passed a law that promises to pay certain monies for six months to people who become unemployed. If the economy is at full employment, then fine, the program pays out very little money. Government spending is low. But consider what happens as the economy begins to slide into recession and real GDP begins to decline. As real GDP begins to decline, some people become unemployed. Cyclical unemployment begins to rise. In the absence of Unemployment Compensation, we would expect the rise in unemployment to further drive down consumer spending as the newly-unemployed people cut back their spending. However, with the Unemployment Compensation program, these newly unemployed people now begin receiving some compensation. Their spending doesn’t decline as much, softening the decline. At the same time, the increased number of claims automatically increases the total money being spent by the government. The government’s spending and transfers have automatically increased, increasing the deficit. The government has automatically launched some fiscal policy stimulus when it pays these unemployment compensation claims. The only thing Congress needs to do with automatic stabilizers is to create the original program and then renew it periodically. We have seen in 2010-12 that sometimes Congress is reluctant to renew automatic stabilizers like unemployment compensation.

There are many programs and laws that act as automatic stabilizers. Social Security, Medicaid, welfare, unemployment compensation, and even the progressive nature of the income tax all act as automatic stabilizers. These programs have all helped to increase confidence in the system too by reducing the fear of recessions and depressions. ***Automatic stabilizers are probably the most effective way to implement aspects of Keynesian fiscal policy.*** They are certainly one of the more positive legacies of John Maynard Keynes.

Automatic stabilizers can make it difficult to “cut” the government budget. Of the multi-trillion dollar total budget that the U.S. federal government spends each year, the majority of that spending is non-discretionary. Most of that non-discretionary portion consists of automatic stabilizers. Suppose the government projects a budget for the coming year of spending $2 trillion including a deficit of $200 billion. But of that projected $2 trillion in spending, $1.3 trillion let us suppose is for non-discretionary items like automatic stabilizers, interest payments on debt, and other previously promised benefits such as social security benefits or veterans’ pensions. Let us suppose that some in Congress are opposed to having a deficit. They want a balanced budget for the coming year. Further suppose they are opposed to raising taxes and want to “cut wasteful spending”. At first glance, it looks feasible: they only have to cut $200 billion out of $2 trilliion – a cut of only 10%. Surely there’s 10% “waste” that can be found, right? Wrong. It’s not that easy. The $1.3 trillion in non-discretionary spending is based on previous government commitments, promises, and contracts. The projected spending amount ($1.3 trillion) is based an estimate of how many people will meet the previously defined criteria for eligibility such as previously served in military, are over age 65, or have become unemployed. The only way to “cut” non-discretionary spending is be eliminating the program or reneging on the government’s previous promises. That means to balance the budget it will be necessary to cut $200 billion from the $700 billion of discretionary spending – a 30% cut. That’s a tall order.

## The Effect of Automatic Stabilizers on Government Budgets

A common error in analyzing government budgets is to conclude that a rising deficit is necessarily a sign of active or discretionary Keynesian stimulus policy. Further many people will attribute the size of the deficit during a recession entirely to some discretionary Keynesian policy and that discretionary budget cuts are needed to reduce such a deficit afterwards. This is an error. Automatic stabilizers automatically raise the deficit when aspects a recession occurs. Automatic stabilizers also automatically reduce the deficit as an economy moves into recovery. Much of this effect is due to the largest, most significant automatic stabilizer: the income tax.

To think this through, imagine a government that starts at a balanced budget: G=T, or better yet: G – T = 0 deficit. Now imagine a recession. Automatic stabilizers like unemployment compensation automatically increase G. But in a recession, incomes are down and that means Tax collections are also down. T is lower. G-T= large deficit in recession. Now imagine that the economy recovers and begins to grow. Unemployment compensation claims drop and with it, G does too. But incomes grow and Tax collections grow. G – T moves back towards balance and perhaps even surplus if the recovery lasts long enough.

Now let's apply that to two situations in the last two decades. At the end of the 1990's, the Clinton administration was able to reduce the deficit significantly and eventually at the end of the decade to run a very small surplus (after including the effects of Social Security). The major reason for the reduction in the deficit was simply moderate growth in GDP for 8 years without a recession. That took the U.S. to nearly full employment and with it, a surplus instead of deficit. In contrast, the years 2008-11 have been marked by very large, even record (by some, not all measures) deficits under the Obama administration. Some critics have taken these deficits as a measure of how much discretionary Keynesian stimulus has been injected into the economy. They have further assumed that unless programs are cut or eliminated, then these budgets will persist into the future. That view is a form of the fallacy of assuming that government is just like a household. In fact, the largest portion of the large Obama (Bush is responsible for 2008) deficits was caused by the decline in tax collections and increase in automatic stabilizer spending. As the economy recovers (assuming it does), tax collections will rise with incomes, automatic stabilizer spending will decline, and the large deficits will become history as automatic stabilizers eliminate them. LESSON: the best way to achieve a balanced budget or close to it is to achieve full employment first.

## What's Next

This Unit finishes Part II, our discussion about real-sector models. The Classical theory was unable to explain how we could have a prolonged recession like The Great Depression and was largely replaced in mainstream economics and policy-making by Keynesian theory. But, economists who advocated Classical theory, often for ideological reasons, mounted a counter-attack on Keynesian theory. By the 1970's, a group of Classical-inspired economists led by Milton Friedman and his students had mounted a fierce counter-attack on Keynesian theory. Their theories, originally called Monetarism, eventually became called Neo-classical or New Classical. Outside of economics these counter attacks were sometimes called Supply-Side or Rational Expectations.By the late 1970's / early 1980's this counter attack had emerged in most Economics departments as the new "mainstream".

In the 1970's the U.S. and other major industrialized nations began to experience ***stagflation*** – mix of a stubbornly high unemployment rate and rising inflation. Neither traditional Classical theory nor simple Keynesian theory says this should be possible. Yet it was clearly happening. In the 1970's government responded to recessions with sharply increased spending and deficits, yet it often responded too late and with too great of a lag. Simple Keynesian theory suggests that inflation shouldn't happen at the same time as high unemployment. The existence of stagflation, coming just years after Keynesian-inspired economists had suggested they could "fine-tune" the economy, provided an opportunity for a counter theory to attach Keynesian theory.

In retrospect, with the benefit of greater data and research, it's clear that the 1970's presented two major supply shocks. One involved oil prices. By the 1970's the U.S. (and most industrialized nations) had become net oil importers on a large scale. Twice in the 1970's oil prices (real prices) doubled in a matter of only weeks/months. This was a massive aggregate supply-style shock to the system since oil is a vital input resource to almost everything. The second supply shock, not well observed at the time, involved the labor supply. In the 1970's three social phenomena combined to create a massive, rapid growth in the labor force. First, the baby boomers began to graduate school and look for jobs. Second, feminism and a change in social values led to a rapid, widespread shift for married women. Married women sought employment in dramatically large numbers. Finally, the de-mobilization of the military due to the end of Vietnam War led to large numbers of former draftee-soldiers entering the workforce. Overall, the labor force was growing faster than even a healthy economy could create new jobs. The result: rising unemployment numbers and rising inflation.

The New Classical/Monetarist counter-attack tried to establish that government fiscal policy (Keynesian) policies couldn't work and that Keynesian policies produced the stagflation. It tried to shift the focus back to aggregate supply and promote a modified laissez-faire approach. It was anti-government spending. It tried to explain the Great Depression as a failure of monetary policy by the central banks, not a failure of government to deficit spend. The counter-attack succeeded in winning over many departments of economics. And with the election of Margaret Thatcher in the UK and Ronald Reagan in the US (although Jimmy Carter was already somewhat Monetarist and weak on Keynesian) policy makers shifted away from Keynesian policies. Not completely. In a recession, there is still a tendency to revert to Keynesian policy, particularly for tax cuts. But the government emphasis on fighting unemployment and on maintaining full employment was gone. The responsibility for maintaining full employment and managing the macroeconomy shifted to the central bank, The Federal Reserve. So, in Part III, we turn our study to money and it's effects on the economy. The first thing we will need to do is find out how money is created. And for that, we need to know how a bank works.