Part 1

Identify each of the following terms or concepts and explain its relevance to 19th and / or 20th century economic history. Each of your answers should not exceed 200 words. 10 points each.

1. Modern Economic Growth

Modern economic growth is defined by three characteristics (lecture 1/22/09 and section 1/28/09):
1. The growth rate of output rises significantly.
2. This increase in the growth rate is sustained. Output grows faster not just for one year or two years, but for decades.
3. Growth is accompanied by structural change. Most importantly, people move out of agricultural jobs in rural areas into manufacturing jobs in urban areas. For example, the share of workers in industry in Britain went from 24 percent in 1800 to 47 percent in 1840 (Baldwin and Martin, 1999, p. 2).

The economist Simon Kuznets coined the term modern economic growth. He called this phenomenon ‘modern’, because it is only since 1800 (or slightly earlier in the case of England) that countries have experienced the above three things (lecture 1/22 and Sylla and Toniolo, 1991, p. 4).

Arguably, modern economic growth is the most important feature of 19th and 20th century economic history. Since some countries have experienced rapid growth while others have not, the world today has enormous cross-country income inequality (section 1/28 and Pritchett, 1997). In 2007, U.S. income-per-capita in PPP adjusted terms was $45,850. In the Democratic Republic of the Congo, it was $290 (section 1/28).

2. Bimetallic standard

Under a bimetallic standard, two metals circulated as currency. Generally these two metals were gold and silver, though in the case of Sweden, copper and silver circulated (Eichengreen, 2008, p. 8). A country’s mint would set the price of gold in terms of silver. This was called the mint ratio. If the mint ratio was 16, for example, that meant that one could exchange 16 ounces of silver for one ounce of gold at the mint. If the mint ratio was significantly above the market ratio (gold was overvalued), then silver would flow out of the country and gold would flow in. It was by setting the mint ratio too high that England ended up on a de facto gold standard in 1717 (Eichengreen, 2008, p. 11).

The difficulty of maintaining the simultaneous circulation of gold and silver is one reason why countries adopted the gold standard in the last third of the 19th century (Eichengreen, 2008, chapter two). The adoption of the gold standard, in turn, is part of the explanation for the large trade and capital flows that occurred between 1880 and 1913 (lecture 2/5).

3. Agglomeration Economies
By agglomeration economies, economists mean that the costs of production decline when production is concentrated in one place. This may be true because of efficiencies from sharing a common labor pool, information gained from physical proximity to other firms, and cheaper prices for common inputs. Agglomeration economies explain why the financial industry (what’s left of it!) is concentrated in Manhattan, and why software production is concentrated in Silicon Valley (section 2/4).

As transportation costs fell during the 19th century, agglomeration economies led manufacturing to be concentrated in developed countries. The result was the industrialization of Europe and the U.S. and the de-industrialization of emerging markets (lecture 1/22, Baldwin and Martin, 1999). India, for example, had a large textile industry in the 18th century. But by the end of the 19th century, textile production was concentrated in the British Midlands, and India imported 70 percent of its textiles (Baldwin and Martin, p. 3).

Thus the first era of globalization was one of divergence. In the second era of globalization, transportation and communication costs fell further. This lessened the importance of agglomeration economies. In particular, unlike in the late 19th century, firms can now easily outsource some production to developing countries. In part because of this, in the last two decades many developing countries (most importantly, India and China) have begun growing much more quickly (lecture 1/22).

4. Hyperinflation

Economists say that there is hyperinflation when prices rise by more than 50 percent every month. Germany, Austria, Hungary, Poland and Russia experienced hyperinflation after World War I (lecture 2/10; Feinstein, Temin, and Toniolo, 1997, pp. 39-40).

Historians debate whether the German hyperinflation was caused by budget deficits or by balance of payments deficits that led to exchange rate depreciation. But these two explanations need not be distinct. Budget deficits were financed by printing money, which led to inflation. Inflation in turn led to currency depreciation. And currency depreciation, by increasing the price of imports, fueled inflation. The vicious cycle was completed when inflation reduced the real value of tax receipts, thus increasing the budget deficit (lecture 2/10; Feinstein et. al. pp. 40-41).

The hyperinflation in Germany ended when social groups agreed on spending cuts and tax increases to eliminate the budget deficit. These actions were made credible by currency reform and the pegging of the currency to gold. But Germany was left dependent on capital imports from the U.S. When these were cut off in the spring of 1929, the logic of the gold standard forced Germany policy makers to adopt contractionary monetary and fiscal policy. The Great Depression was the result (lecture 2/10; Feinstein et. al. pp. 97-99).

Part 2

Answer BOTH of the following two essay questions. Please limit your answer to each question to 600 words. 30 points each.

1. Between 1880 and 1914, the U.S., Britain, Germany, and many other countries successfully fixed their exchange rates while allowing unregulated international capital flows. What political and economic factors made this possible? Why were fixed exchange rates and capital mobility more difficult to reconcile after World War I? Does your analysis hold lessons for countries trying to fix their exchange rate today?
In the classical gold standard era (1880 to 1914) most countries fixed the price of their currency in terms of gold. This meant that the exchange rate was fixed between any two countries on the gold standard. Fixed exchange rates were accompanied by capital mobility (no capital controls). In the U.S., one was free to take dollars and exchange them for gold at the U.S. Treasury at a fixed rate. One could then take this gold, ship it to England, and exchange it for pounds (again at a fixed rate) (lecture 2/5).

We know from the Trilemma that countries with fixed exchange rates and no capital controls cannot have an independent monetary policy. Thus countries on the gold standard were not free to change interest rates in response to domestic economic disturbances. Instead, the level of interest rates and the growth rate of the money supply in one country was largely determined by interest rates and money supply growth in other countries (section 2/11 and Trilemma handout).

Today countries typically find it quite difficult to reconcile a fixed exchange rate with capital mobility. Often the fixed exchange rate is not credible – investors suspect that if they sell sufficient amounts of the domestic currency, the central bank will choose to devalue. Central banks lack credibility because political factors tend to limit their ability to completely give up an independent monetary policy (lecture 2/5).

In the classical gold standard era, countries’ commitments to gold tended to be much more credible. There are three (related) reasons. First, limited democracy reduced the political pressure on central banks to respond to domestic economic shocks. Thus central banks were free, for example, to increase interest rates to retain gold, even if this led to higher unemployment. Second, political pressure on central banks was limited by the fact that economists had little understanding of the ability of central banks to stabilize the economy. Third, before 1914, prices and wages were more flexible than they are today; this made the costs of contractionary monetary policy much smaller (Eichengreen, 2008, chapter 2; lecture 2/5, lecture 2/12).

International cooperation lent further credibility to countries’ commitment to the gold standard. For example, during the 1890 Baring crisis, the Bank of England borrowed gold from the Bank of France (Eichengreen, chapter 3, p. 33).

Since their commitment to gold was credible, countries benefited from stabilizing capital flows. If the dollar depreciated slightly against gold, speculators would buy the dollar in expectation of its appreciation. The combined actions of speculators would be stabilizing – they would lead to dollar appreciation rather than further depreciation (Eichengreen, chapter 2, p. 31).

After WWI, the political environment was much less conducive to the operation of the gold standard. The spread of universal suffrage and labor union power put more political pressure on central banks to respond to economic disturbances. Economists increasingly recognized the power of monetary policy to affect the economy. And the increasing rigidity of wages and prices made the actions necessary to defend the gold standard more costly (lecture 2/10, 2/12; Eichengreen, chapter 3).

The combination of these factors and the experience of some countries with hyperinflation reduced the credibility of the gold standard, lessening the tendency for capital flows to be stabilizing. And when crisis threatened, countries now found it more difficult to cooperate. The result was an international monetary system that was no longer well-suited to the economic and political environment (lecture 2/10, 2/12, Eichengreen, chapter 3).

For countries today, this story suggests that it is difficult to maintain a fixed exchange rate without capital controls. If countries’ do attempt this, they ought to do their utmost to make the fixed exchange rate
credible. By doing so, they reduce the probability that destabilizing capital flows will force the central bank to choose between domestic economic objectives and a fixed exchange rate.

2. In an open letter to president Franklin Roosevelt on December 31st, 1933, John Maynard Keynes wrote:

[A]s the prime mover in the first stage of the technique of recovery I lay overwhelming emphasis on the increase of national purchasing power resulting from governmental expenditure which is financed by Loans and not by taxing present incomes. Nothing else counts in comparison with this. In a boom inflation can be caused by allowing unlimited credit to support the excited enthusiasm of business speculators. But in a slump governmental Loan expenditure is the only sure means of securing quickly a rising output at rising prices. That is why a war has always caused intense industrial activity. In the past orthodox finance has regarded a war as the only legitimate excuse for creating employment by governmental expenditure. You, Mr President, having cast off such fetters, are free to engage in the interests of peace and prosperity the technique which hitherto has only been allowed to serve the purposes of war and destruction.

Did Franklin Roosevelt follow Keynes’ advice? If not, why not? Does the history of the Great Depression suggest that Keynes’ prescription was the right one? What are the implications of your answer for U.S. policy today?

Answer:

No, Franklin Roosevelt (FDR) did not follow Keynes’ advice; he did not engage in significant fiscal stimulus. In lecture on February 17th, we saw that the budget deficit never was greater than 6 percent of GDP during the 1930’s. And even this is somewhat misleading: the budget deficit grew this large not because of active government efforts at fiscal stimulus, but because the depression led to lower incomes which reduced tax revenues. Roosevelt campaigned in 1932 on a balanced budget platform and remained concerned with budget deficits at least through 1938 (Fearon 1993). Indeed, Roosevelt increased taxes and reduced spending in 1937 (lecture 2/17).

Another way to see how little fiscal policy FDR attempted is to compare the size of the budget deficit with the size of the shortfall in private spending. In lecture (2/17), we saw that a 20 percent unemployment rate implied a private spending shortfall of perhaps 40 percent. This suggests that fiscal stimulus ought to have been on the order of 20 percent of GDP.

A key graph is on p. 44 of the February 17th lecture. Here we see (courtesy of Christina Romer) that fiscal policy had no visible impact on output during the 1930’s. This is not because fiscal policy did not work; it is because it was not tried.

Why didn’t FDR attempt to increase employment through deficit spending? One answer is that deficit spending was a novel idea. It was only gradually accepted by economists (Fearon). In particular, Roosevelts’ economic advisors were agricultural economists whose concern was, strangely, over-production (lecture 2/17). Furthermore, both Roosevelt and his treasury secretary Henry Morthenthau seem to have personally disapproved of budget deficits. The New Deal demonstrated that FDR was quite willing to experiment with many new economic ideas; unfortunately, deficit spending was not one of them (Fearon).
There is an active debate in the economics profession on the effect of fiscal stimulus. Some economists argue that in the Great Depression, deficit spending would have done little to increase output and reduce unemployment. I believe, however, that the preponderance of evidence suggests that fiscal stimulus could have reduced unemployment during the 1930’s. Two pieces of historical evidence support this view. First, when FDR reduced the budget deficit in 1937, the economy went into a sharp recession. This action coincided with restrictive monetary policy, making it difficult to disentangle the effects of the contractionary fiscal shock. But this episode nonetheless suggests that government spending had the power to affect the economy. Second, FDR was willing to engage in significant deficit spending once World War II began (see the graph of the budget deficit on p. 43 of the 2/17 lecture). When this spending began, unemployment fell to normal levels (see the graph of unemployment p. 10 of the 2/19 lecture). Again, correlation is not causality, but many economists have taken this episode to suggest that large scale fiscal stimulus could have reduced unemployment dramatically during the Great Depression.

This history suggests that fiscal stimulus is the right medicine for the U.S. today. It suggests that absent fiscal stimulus, expansionary monetary policy (which there was in the U.S. after 1933) may reduce unemployment, but only at a relatively slow rate.