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Economics 115
The 20th Century World Economy
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# Suggested Answers

***SAS = See Answer Sheet**

***Sentences copy-and-pasted from Wikipedia or other online resources tend to use slightly different concepts/definitions than what we learned in this course, or sometimes incorrect altogether. For the purpose of this course, these answers cannot be granted full credit, especially when using other's work without citing the appropriate source.**

## Part 1

1. **Convergence club**

   By the time frame of human history, today's wide disparity between rich and poor countries is fairly recent. Until the industrial revolution, the whole world was poor. The globalizations of the 19th and 20th centuries both produced income *divergence* in the wider world as well as *convergence* among a small group of high-end nations. That is, 'twin peaks' convergence story occurred during the first globalization wave (Baldwin and Martin 1999). We cannot talk about the convergence club without reference to the global divergence. "Convergence club" refers to this group of high income countries that had reached the living standards, industrial structure, and productivity levels of the leading countries - Britain in the nineteen-century and the U.S. in the twentieth. That is, convergence in growth rates occurred within the set of developed economies (Pritchett 1997).

   Many economists would emphasize the right policies as the key determinant of ability to join the convergence club. The right policies in this context are typically thought to include i) a freely functioning price mechanism, ii) price stability, iii) sound and stable fiscal policy, iv) respect for private property and limited taxation, and v) openness to the rest of the world. This is what came to be referred to in the 1990s as the "Washington Consensus". (lecture 1/27)

2. **Price-specie flow mechanism**

   The price-specie flow mechanism is a model developed by David Hume to explain how trade imbalances can be automatically adjusted under the gold standard. In its original form, the model assumes that only gold coins are circulated and the role of central bank is negligible.

   This mechanism is best illustrated using an example. Suppose there is a trade deficit – there are more imports than exports. This results in an outflow of gold, subsequently decreasing domestic money supply. Then the price level falls, which in turn makes domestic goods relatively cheaper than foreign goods. This leads to more exports and less imports thereby self-correcting the trade imbalance.

In reality, paper money was used more frequently than gold coinage and central banks intervened in the economy. International gold shipment was not significantly observed and there is no role for international capital flows, which was very important at the time, in this story either.

We can reconcile this shortcoming of the model by relaxing the assumptions. The extended version that we covered in section allowed paper money to circulate instead of gold coinage and allowed the active role of central banks. Central bank management, using interest rates as a policy tool in anticipation of the trade imbalance facilitated the self-correcting mechanism outline by the model, explains both why gold flows were small and the role played by capital flows in adjustment (lecture 2/5).

### 3. Policy Trilemma

The trilemma is the fact that countries cannot have more than two of the following three things: i) A fixed exchange rate, ii) an open capital market (no capital controls), and iii) an independent monetary policy.

For example, countries on the gold standard (like the U.S. from 1873-1914) chose to have a fixed exchange rate and open capital markets. They did not have independent monetary policy. Instead, the government had to merely operate according to the "rules of the game" in order to preserve gold convertibility and stabilize the monetary system, which meant there was no room for independent monetary policy.

(see Handout 2/18 for more examples and intuition)

### 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 <u>budget deficits</u> or by <u>balance of payments deficits</u> 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**

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? Is it likely to have a "gold standard" again in the future? If so, why? If not, why not?**

   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 Tilemma 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 were largely determined by interest rates and money supply growth in other countries (*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. The political as well as economical conditions are certainly different from the past, so it is unlikely to have a gold standard monetary system as in the past. However, a completely new form of fixed exchange rate regime may be still an open question.

2. **It is often said that the stock market crash of October 1929 caused the Great Depression. Is this assessment correct or were there other factors that might have caused or deepened the crisis? Today, we face another economic crisis. Could it become another Great Depression? If so, why? If not, why not?**

As described in Atack and Passell 1994, the stock market crash in October 1929 became the most symbolic cause of the Great Depression due to its visibility, but industrial production had been declining since the summer of 1929 which was in turn due to an interest rate increase by the Fed in January 1928 in an attempt to prevent diverting resources from productive uses (speculation in stock market). Hence, it is believed that the stock market crash was not the direct or only cause because of the timing of the event. Moreover, the large decrease in consumption cannot be explained by the stock market crash alone because conventional economic model suggests only a small marginal propensity to consume out of stock market wealth.

It is also important to note that the factors that might have caused the initial recession are not necessarily the same as the factors that deepened it into a Great Depression. For example, the large and unexpected decrease in consumption expenditures, especially on big-ticket items, as espoused by Temin or the loss of business confidence that undermined investment (according to Keynes) could have initiated the recession.

This recession was then worsened by the banking crises (three of them in the U.S. but also important bank failures in Europe such as Credit Anstalt in Austria) and by bad policies. On the monetary side the problem was, according to Friedman and Schwarz, in the sense of providing too little liquidity to avoid the bank failures; according to the Austrians, in the sense of interventions being unhelpful and disruptive. On the fiscal side by timid policies (Hoover did increase fiscal expenditures but it wasn't enough to compensate for falling internal demand and exports). That is, governments and central banks failed to respond in stabilizing fashion, for a combination of ideological, historical and institutional reasons. Then the crash of stock markets, starting on Wall Street, depressed economic activity further.

However, no picture of the Great Depression is complete without acknowledging its international scope, so we should also include international trade and finance factors such as the instability of the interwar Gold Standard which also distorted trade goods' prices. The combination of the gold standard and German war reparations turns out to be especially important to explain why Europe was hit by the Depression too. The Gold Standard also helps explain the behavior of the Fed during the crisis: the tightness of monetary policy reflected fears of gold outflows and a commitment to the gold standard. Also, U.S. protectionist trade policies such as Smoot-Hawley Tariff started a vicious cycle of protectionist policies that depressed trade and decreased demand for U.S. domestic goods. Overall, the stock market crash was only a proximate cause, not an ultimate cause of the Great Depression.

Could the current crisis become another Great Depression? Institutions have changed a lot (partly as a reaction to the GD). For example, the central banks now attempt to provide liquidity, commercial banks in trouble are rescued, the fiscal reaction is more aggressive, public sector is larger where spend is less volatile, and many currencies are under floating exchange rate regimes, the dollar in particular. This would seem to indicate that another Great Depression is unlikely.

However, we observe that some factors are repeating themselves: besides the obvious stock market crash, there has been a substantial decrease in consumption of big-ticket items such as houses and business confidence (investment), both of which seem hard to restore. On the policy side, the looseness of monetary policy doesn't seem to be working (possibly due to a liquidity trap), fiscal policy might be too timid yet again and is not being coordinated internationally (e.g. Europe is being far less aggressive than the U.S. so far). Additionally, banks continue being very weak even after the initial rescue attempts. This would suggest that the crisis could still deepen.