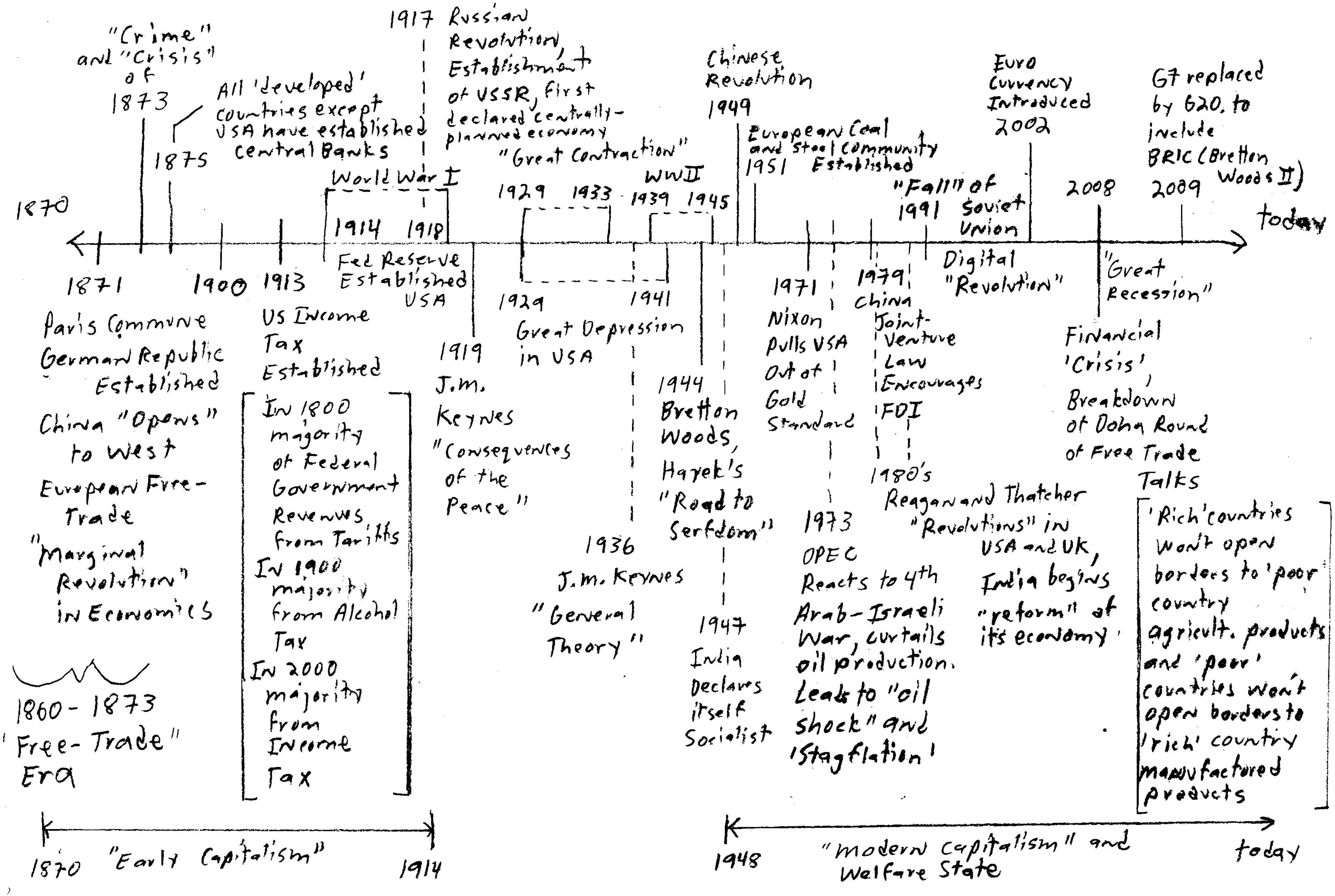
Lecture Notes for Economic History

Time line for "modern Economy" (or, Capitalism)



1870

"Crime" and "Crisis" of 1873

1875 All 'developed' countries except USA have established central Banks

1917 Russian Revolution, Establishment of USSR, first declared centrally-planned economy

World War I 1914 1918

"Great Contraction" 1929 1933

WWII 1939 1945

Chinese Revolution 1949

European Coal and Steel Community Established 1951

"Fall" of 1991 Soviet Union

Euro Currency Introduced 2002

2008

G7 replaced by G20, to include BRIC (Bretton Woods II) 2009

today

1871 Paris Commune German Republic Established

China "Opens" to West

European Free-Trade

"Marginal Revolution" in Economics

1860 - 1873 "Free-Trade" Era

1900

1913 US Income Tax Established

In 1800 majority of Federal Government Revenues from Tariffs
In 1900 majority from Alcohol Tax
In 2000 majority from Income Tax

Fed Reserve Established USA

1919 J.M. Keynes "Consequences of the Peace"

1929 1941 Great Depression in USA

1936 J.M. Keynes "General Theory"

1944 Bretton Woods, Hayek's "Road to Serfdom"

1947 India Declares itself Socialist

1971 Nixon pulls USA Out of Gold Standard

1973 OPEC Reacts to 4th Arab-Israeli War, curtails oil production. Leads to "oil shock" and 'Stagflation'

1979 China Joint-Venture Law Encourages FDI

1980's Reagan and Thatcher "Revolutions" in USA and UK, India begins "reform" of its economy

Digital "Revolution"

"Great Recession"

Financial 'Crisis', Breakdown of Doha Round of Free Trade Talks

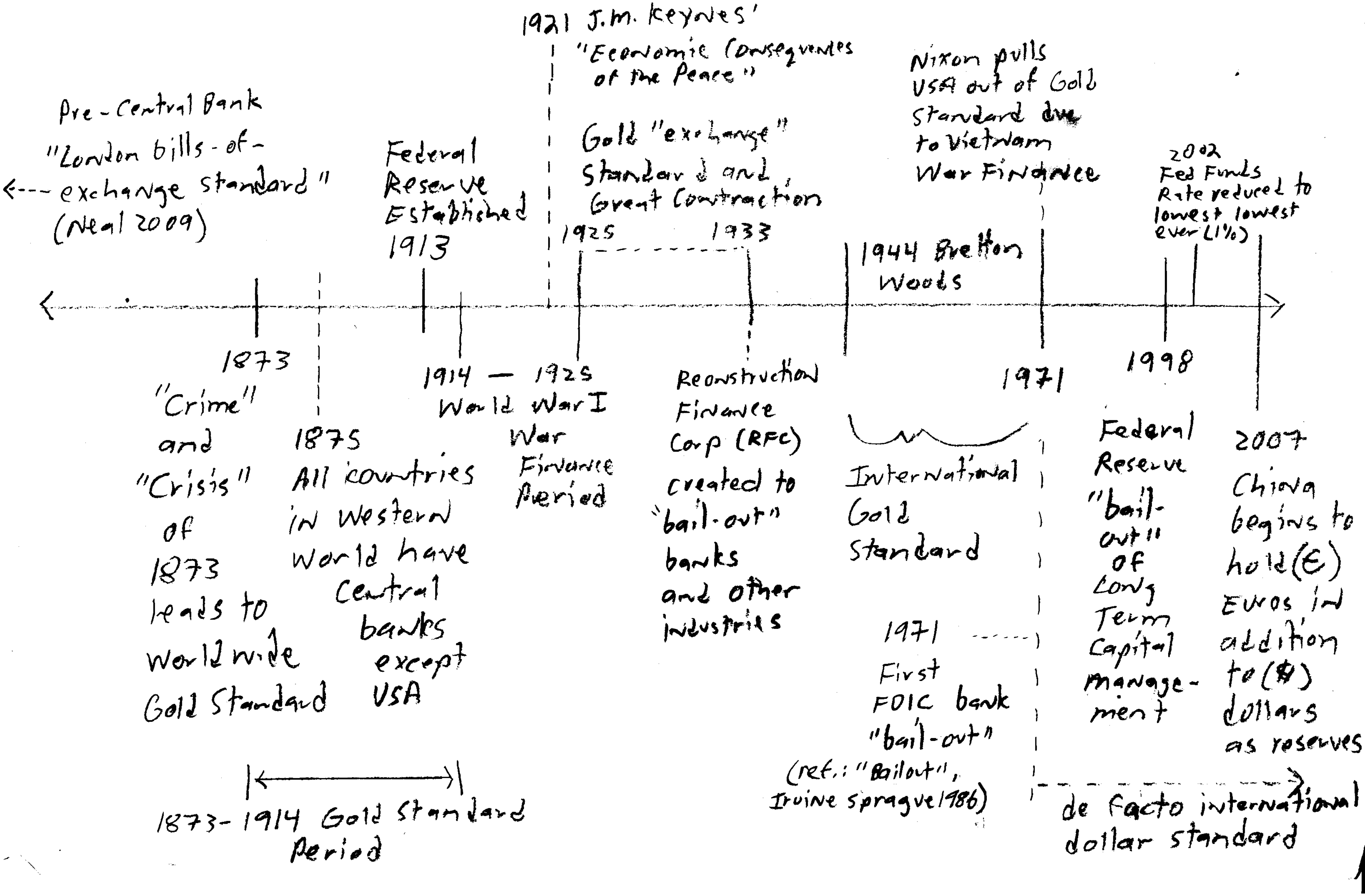
'Rich' countries won't open borders to 'poor' country agricult. products and 'poor' countries won't open borders to 'rich' country manufactured products

1870 "Early Capitalism" 1914

1948 "modern capitalism" and Welfare State today

Lecture Notes for Economic History

Time-line of International and US monetary Policy



Pre-Central Bank "London bills-of-exchange standard" (Neal 2009)

1873 "Crime" and "Crisis" of 1873 leads to World wide Gold Standard

1875 All countries in Western World have Central banks except USA

1873-1914 Gold Standard Period

Federal Reserve Established 1913

1914 — 1925 World War I War Finance Period

1921 J.M. Keynes' "Economic Consequences of the Peace"

Gold "exchange" Standard and Great Contraction 1925 1933

Reconstruction Finance Corp (RFC) created to "bail-out" banks and other industries

1944 Bretton Woods

International Gold Standard

Nixon pulls USA out of Gold Standard due to Vietnam War Finance

1971

1971 First FDIC bank "bail-out" (ref.: "Bailout", Irvine Sprague 1986)

1998 Federal Reserve "bail-out" of Long Term Capital management

2002 Fed Funds Rate reduced to lowest lowest ever (1%)

2007 China begins to hold (€) Euros in addition to ($) dollars as reserves

de facto international dollar standard

The Gold Standard

Since the collapse of the Bretton Woods system in 1971 for a fixed gold standard internationally, the reserve currency for the world's international trade has been the U.S. Dollar. However, in that the Chinese central bank has been holding Euros in addition to dollars since 2007, there is now competition against the dollar's dominance.

Prior to 1971 it can be viewed that, other than in times of war finance, that the international economy has tended towards a gold standard. (This is consistent with the three part definition of money, 1) that it is a store a value - gold as species has intrinsic value thus it is something that people wish to hold for its own sake, 2) as a means of exchange, and 3) that it is a unit of account, or, a common measure of value for accounting and to price unlike goods).

Prior to Bretton Woods the world was on a gold standard in the interwar (between WWI and WWII) years, and, prior to that, until WWI. The evolution of an international gold standard led in part to the classical liberal, "free trade" era, between 1860 and the crisis of 1873.

The Gold Standard (cont.)

Each of the three periods of a "gold standard" differed in substance. The standard prior to WWI was before all the industrialized countries had central bank-controlled monetary policy (the US, the largest economy in the world, did not adopt central banking until just before WWI). It is for this reason economic historian Larry Neal calls this period the "London bills-of-exchange period"; for the most part exchange rates were flexible based on gold based on bills-of-exchange traded on the London exchange.

The interwar period gold standard has been seen by some economic historians (covered later in these lecture notes) as dysfunctional because, for, example local currencies were fixed in value to a unit of gold, but, for example, the french financial authorities were not given adequate authority to exchange gold internationally to ensure adequate gold reserves to maintain the gold-value of the Franc. In turn because of the contractionary monetary policies of the USA in the late 1920s-mid-1930s this lead to monetary contraction throughout the international economy.

The Gold Standard (cont.)

The first gold standard period, until WWI, was an evolutionary period where one country after another adopted gold as its standard for valuing its local currency. The following is a summary of this evolution.

1695 England Act of Parliament gave Bank of England right to buy, sell and mint gold coin with unlimited exchange. The BoE was given "monopolistic power" but not a "monopoly".

[1789 - 1848
Age of Revolution, see Hobsbawm (1962)

1818 Netherlands (was aloof from revolution as had already broken from contintel European monarchical structure in the 1500s].

1854 Portugal

1871 Germany, (corresponding with founding of Germany)

1873 USA "Defacto" ("crime of 1873" and failure of silver movement)
Belgiam, Italy, Switzerland, France

1875 Scandanavia (Denmark, Norway, Sweden)

1876 Spain

1878 Finland

The Gold Standard (cont.)

1879 Austria (Austria-Hungary)

1893 Russia

1897 Japan

1900 USA "De Jure"

[World War One]

1914 UK pound no longer convertable to gold for War Finance
(Due to dominance of British FDI (foreign direct investment)
in world economy, British non-convertability means end to
fist gold standard era)

1925 UK rejoins gold standard but at the pre-war level, which
lead to rapid devaluation of the pound and worker unrest
due to rapid decreases in purchasing power. J.M. Keynes (1919)
"Consequences of the Peace" argued against this, setting of
pre-war parity and predicted the 'deflationary' bias on effect
on working class standards of living.

1920s Other Industrialized countries join interwar dysfunctional
Gold "exchange" standard.

1931 UK pulls-out of Gold "exchange" standard and begins
economic recovery after Great Contraction

1930s Other Countries (except USA who experienced Great Depression)
pull out of dysfunctional contractionary gold "exchange"
standard and recover economically, US pulls out of Gold
Standard in 1933 but takes action domestically which
causes prolonged high-unemployment.

[World War Two]

1944 Bretton Woods 3rd Period of Gold Standard established,
lasts until 1971 when Nixon administration cancels, US $
convertability due to Vietnam 'conflict' war finance

"Free Trade Era" or Classical Liberal Period (1860-1873)

The evolution of what is known as the Free Trade Era is an excellent example of cumulative and circulor causation in economic history. It shows, in effect, how the liberalizing of policies in one country can encourage the liberalization of economic policies worldwide. This might be said to be a "General Tendency" in economies.

However the reverse can also be true. A general tendency in economies is that after an economic crisis countries revert to economic Nationalism (protectionism). This occured after the "Crisis of 1873" as well as after the unsustainable "Gold Exchange Period" after World War I. And, as we have seen from the mercantilist and industrialization periods, trade-wars have led to real war, and, vice-versa.

"Free Trade Era" (Cont.)

The British "Corn Laws" were a protectionist tariff against the importation of bread grains into England. The purpose, like all protectionism, was to support special interest groups over the welfare of the general populace, in this case the British landed class ("rentiers") who held political power. The tariff on agriculture produce in turn kept up the value of British farm land, and, led to less productive agriculture methods and higher food costs in England. The Corn Laws were strengthened in 1913 after Napoleonic wars.

David Ricardo's "Principles" of 1817 was a treatise in fact against the Corn Laws, for comparative in trade, and argued that high land rent did not add to the productive powers and capital accumulation.

"Free Trade Era" (cont.)

Robert Peel might be seen as the "Great man" in bringing classical liberal policies to the British government, including assisting in overturning the Corn Laws. Peel as a Tory liberal member of government reduced the number of capital offenses from more than 200 to less than 100 and established the first municipal police force. The Tories reformed fiscal policy by lowering taxes and reduced business regulation (this might be seen as an early example of "supply-side" economies). The Tories also abolished export taxes and instituted an income tax to replace the revenues. However, initially the Tories were unsuccesful in overturning the Corn Laws.

In 1839 the Anti-Corn Law League was formed, a city-based political group which tried to lobby for over-turning the trade barriers. This is an example of the country-city dialectic in policy.

"Free Trade" Era (cont.)

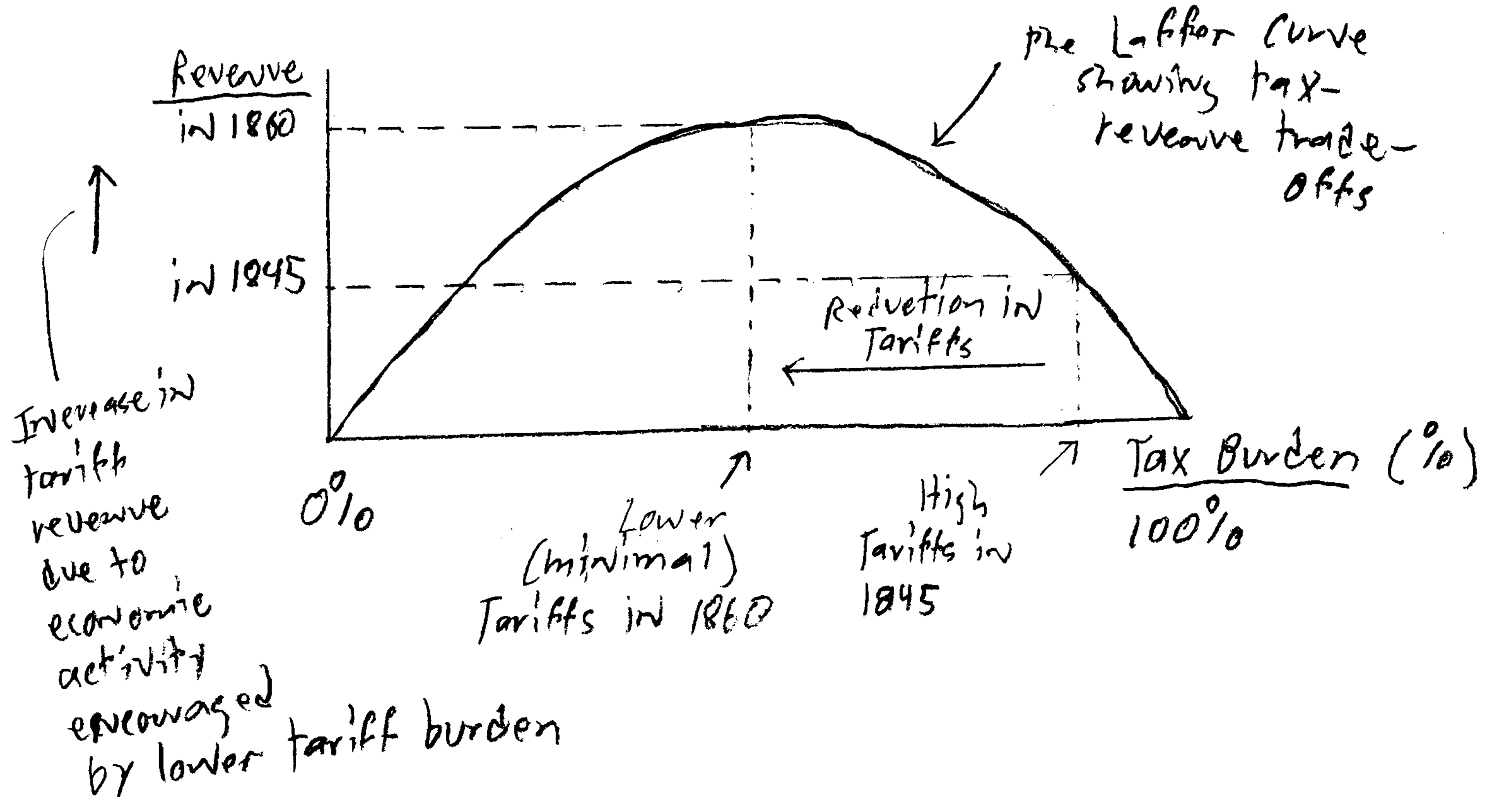
In 1841 the Whigs tried to reduce import quotas and tariffs on wheat and sugar but failed so called a new election. Peel joined the Whigs at this point because the Tories did not support the Free Trade effort. The Whigs also included the Chancellor the Exchequer Gladstone (who founded "The Economist" magazine).

In 1845 the Potato famine hit Ireland and Scotland, at this point in 1846 John Peel re-introduced the overturning of the Corn Laws and was successful, despite Tory objection. The Whigs were also succesful in overturning the Navigation Acts, the last vestiges of British mercantilism.

By 1860 very few tariffs remained yet duty income was greater in 1860 than in 1845 due to the increased volume of trade. This can be seen in the "Laffer Curve" where a reduction in taxes can actually lead to an increase in government revenues due to an increase in economic activity encouraged by a reduction in taxes.

"Free Trade" Era (cont.)

Laffor Curve Showing Increase in Tariff Duties with Decrease in Tariffs



The Laffor Curve showing tax-revenue trade-offs

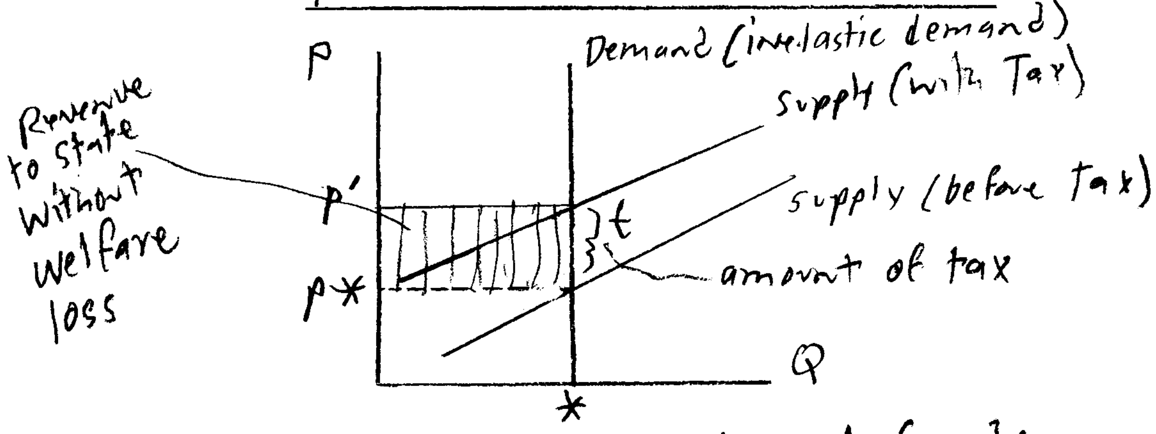
Increase in tariff revenue due to economic activity encouraged by lower tariff burden

Note that when taxes (or tariffs) are 0% or 100% no tax is collected. (No economic activity is expected to occur at a tax rate of 100%). The public policy debate then is over what rate actually maximizes both economic activity and government revenue.

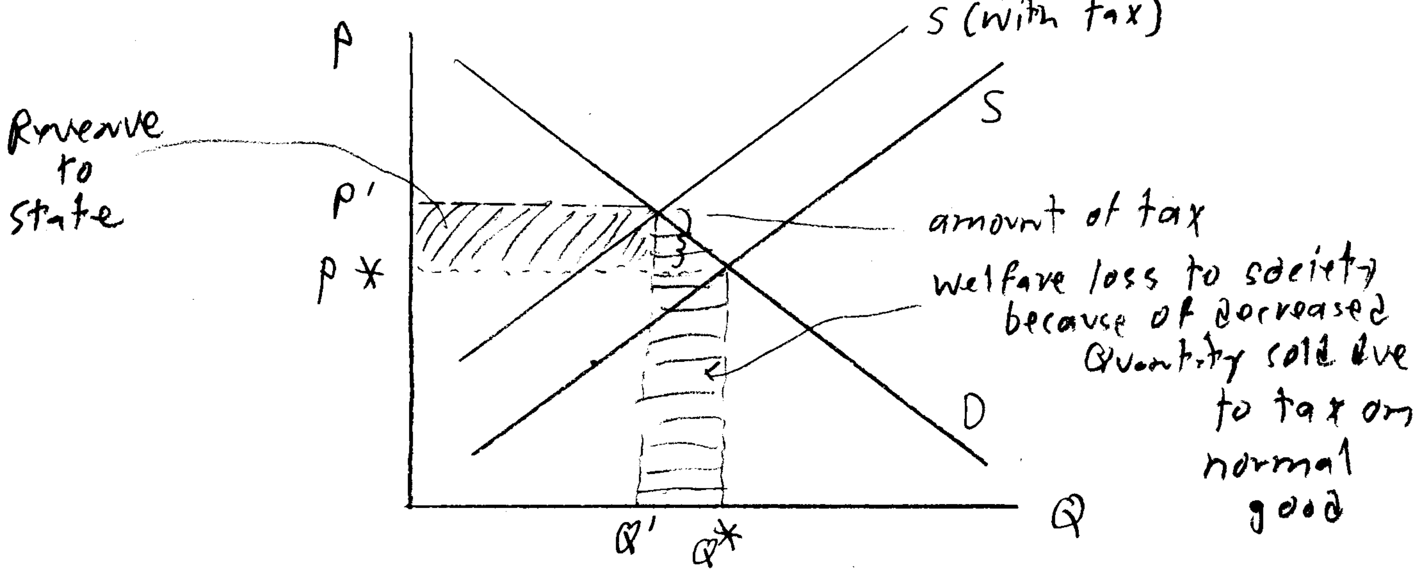
"Free Trade". Era (cont.)

After the Whig implemented free trade policies of the late 1840s British import taxes remained on those items deemed to be 'luxury goods' with low price elasticity of demand (brandy, wine, tobacco, coffee and tea). Because Demand is seen as inelastic, some economists believe that taxing goods with low elasticity of demand instead of goods with high elasticity of demand brings less of a welfare loss to society

Tax Burden on Luxury Goods


P
Demand (inelastic demand)
supply (with Tax)
supply (before tax)
Revenue to state without welfare loss
p'
t
amount of tax
p*
Q
*

Tax Burden on Normal Goods


P
S (with tax)
S
Revenue to state
p'
p*
amount of tax
welfare loss to society because of decreased Quantity sold due to tax on normal good
D
Q
Q'
Q*

"Free Trade!" Era (cont.)

Napoleon III wanted peace and trade with Britain, but was not able to obtain this until after the abolishment of the Corn Laws. (As we have noted the original "economists", The French physiocrats, especially Turgot, in the 1760s had been arguing for "Laissez-Faire" economic policies, and contemporarily in the 1800s predominant was Frederic Bastiat, whose "How Does Paris Get Fed" and "The Seen and the Unseen" were arguments for free trade and against the futility, and unintended consequences of, central planning of the economy).

In 1860, with the establishment of British free-trade, the Anglo-French Treaty was signed, which reduced French tariffs on English goods to an average of 15%

This treaty set-up the operating procedures by which modern trade negotiations are conducted. The 1860 Treaty included a "Most Favored Nation" (MFN) clause which meant that whoever signed a treaty with any of signatories to the agreement received the lowest tariff treatment agreed upon by any of the countries.

"Free Trade!" Era (cont.)

For example under MFN in France agreed to place 15% tariff on British wheat, whereas Britain agreed to allow French wheat into Britain tax-free, anyone that signed-on to the Treaty would be able to export wheat to either France or Britain without a tariff.

Because England was already mostly "open-borders" (except as noted on "luxury goods") they had little bargaining power (yet their capital accumulation during this free trade era might show the economic advantages of open-borders relative to the capital accumulation of those with more "managed trade" during the period), therefore it was France who negotiated with a gained signatories to the agreement.

In the 1860s France signed trade agreements with Belgium, Germany, Italy, Switzerland, Sweden, Norway, Netherlands (basically with everyone but Russia, even though Russia was soon to be importing French capital and technology).

This cumulative, "domino-effect", of trade agreements lead to what is known as the "Free Trade" Era.

The "Crime" and "Panic" of 1873

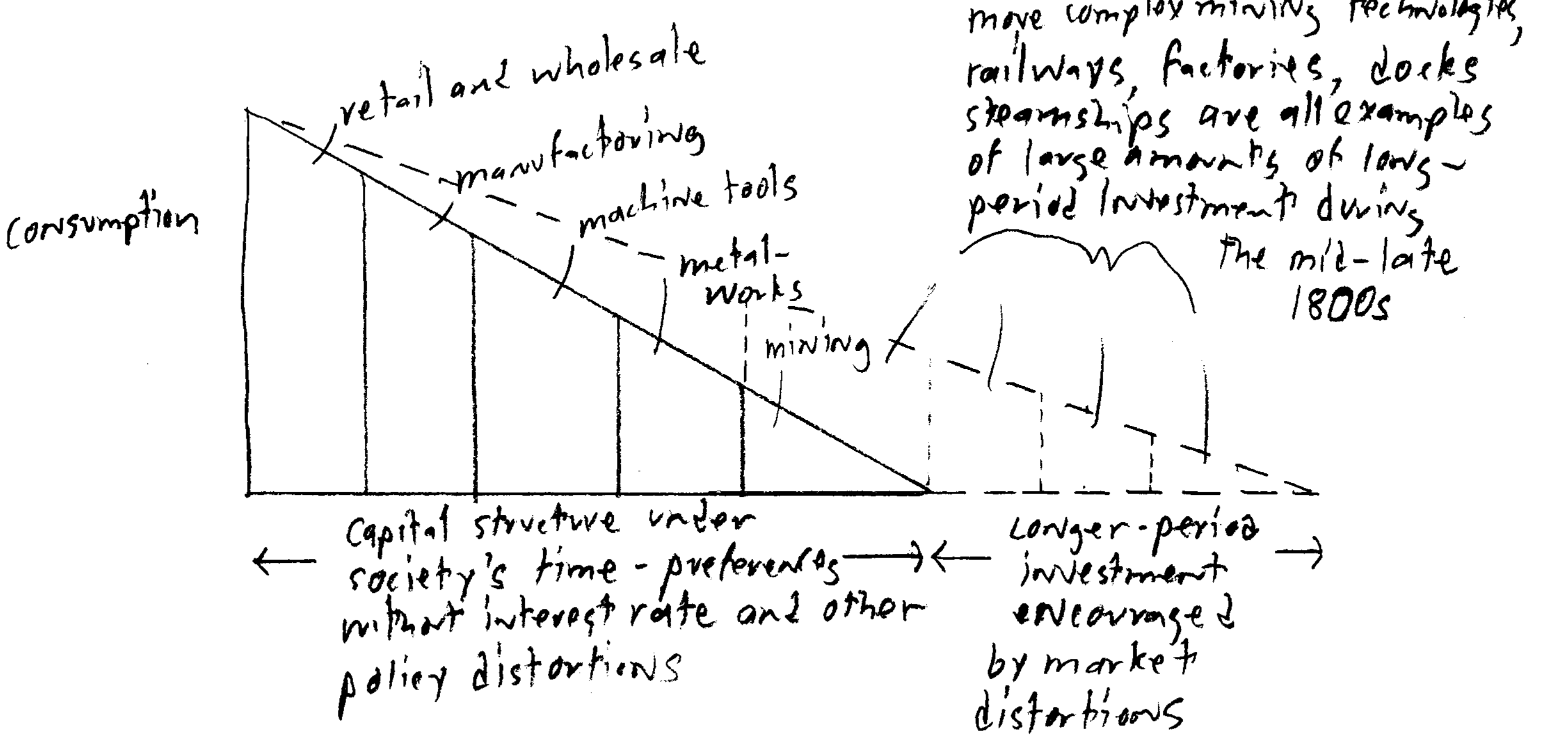
The Free Trade Era came to an end in 1873 with a worldwide crisis. Economic historians do not of course agree on the exact cause of this panic, however, some causes might be,

- The removal of fetters to banking in the 1850s which lead to an irrational exhuberance in investment.
- Government Sponsored Enterprises (GSEs) making over- and unsound- investments during Industrialization in France, Germany and Russia
- Government policy worldwide creating incentives for overinvestment in highly productive railway technologies, including the creation of irrational exhuberance for expected returns to this investment.
- War reparations from France into Germany which rapidly increased the German supply leading to a lower than "Natural rate" of interest and thus to over-investment in longer-term stages of production capital structure.

The "Crime" and "Panic" of 1873 (cont.)

The removal of banking constraints and the German receipt of reparations might both have sent market signals to entrepreneurs that long-term capital was in fact less costly than it was in reality sustainable.

The same concept can be applied to land grants given to railroad operators in the United States after the Civil War (1861-1866), these grants gave incentives to over-invest in railroads, and the industries served by railroads.


consumption
retail and wholesale
manufacturing
machine tools
metal-works
mining
more complex mining technologies, railways, factories, docks steamships are all examples of large amounts of long-period investment during the mid-late 1800s
← capital structure under society's time-preferences without interest rate and other policy distortions →
← Longer-period investment encouraged by market distortions →

The "Crime" and "Panic" of 1873 (cont.)

It could be argued then that after the crisis hit many of these long-term investments were unsustainable because of the market distortions unleashed through the policy changes of the 1850s~1860's. The assets of investment were diverted from earlier - more sound, less risky - stages of production, to more later, more risky stages of production. This meant that assets, and employment, were "tied-up" in these later stages of production. Therefore, when crisis hit this caused high unemployment and loss of value in the world's stockmarkets because it is not possible to instantaneously move assets from one place to another. For example, there were 5 railways going from Chicago to San Francisco, when perhaps one would have been most efficient.

The "Crime" and "Panic" of 1873 (cont.)

Crisis was caused by what is viewed as the "Crime" of 1873. In 1873 The US Government stopped accepting silver as legal tender (moving to a Gold Standard from a bi-metal system). This of course depressed the stock prices of mining and related companies causing a crash of the New York Stock Exchange (NYSE) in September 1873.

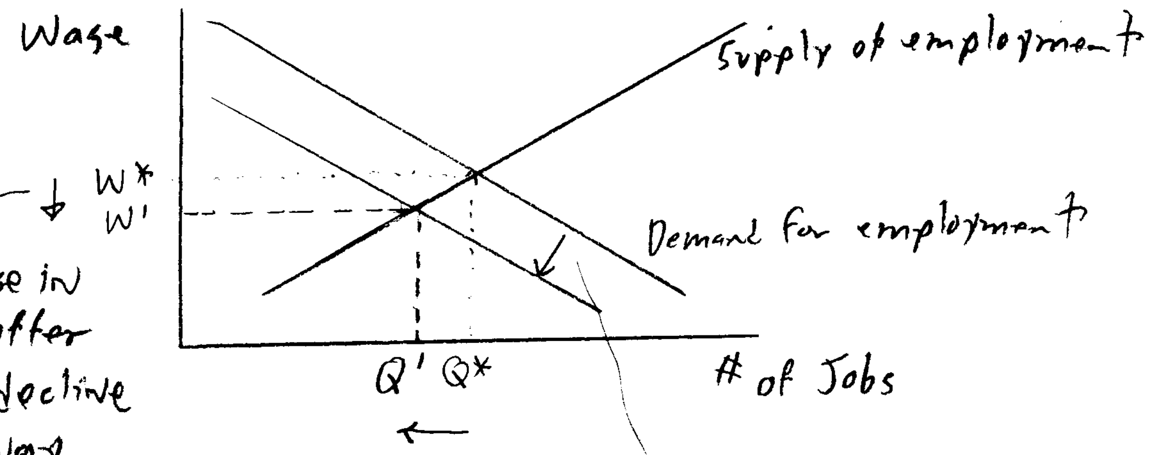
In addition the Jay Cooke Bank went bancrupt because it could not get buyers for the bond issuance it had issued to underwrite a second cross-continentail railroad in the United States. This in turn created a financial crisis in addition to a crisis in the 'real' economy. There were stock market crashes in Vienna, Berlin, Paris, London and St. Petersburg in addition to New York.

In the US, 89 of 364 railway companies went bancrupt and unemployment averaged 14% during 1873-1879. This was the biggest Depression in the United States until the Great Depression of the 1930s

The "Crime" and "Panic" of 1873 (cont.)

The railway industry crash then lead to the first major labor unrest in the U.S., due to the decrease in Demand for railway workers, a decreased wage offer. In addition the striker demand better working conditions and an 8 hour day.

Market for Railway Workers in the USA after the "Crisis" of 1873



Decrease in wage-offer due to decline in railway industry demand

Decrease in employment on offer due to decrease in railway industry demand

Shift back in demand for railway services due to restructuring of economy after "Crime" and "Panic" of 1873

The "Crime" and "Panic" of 1873

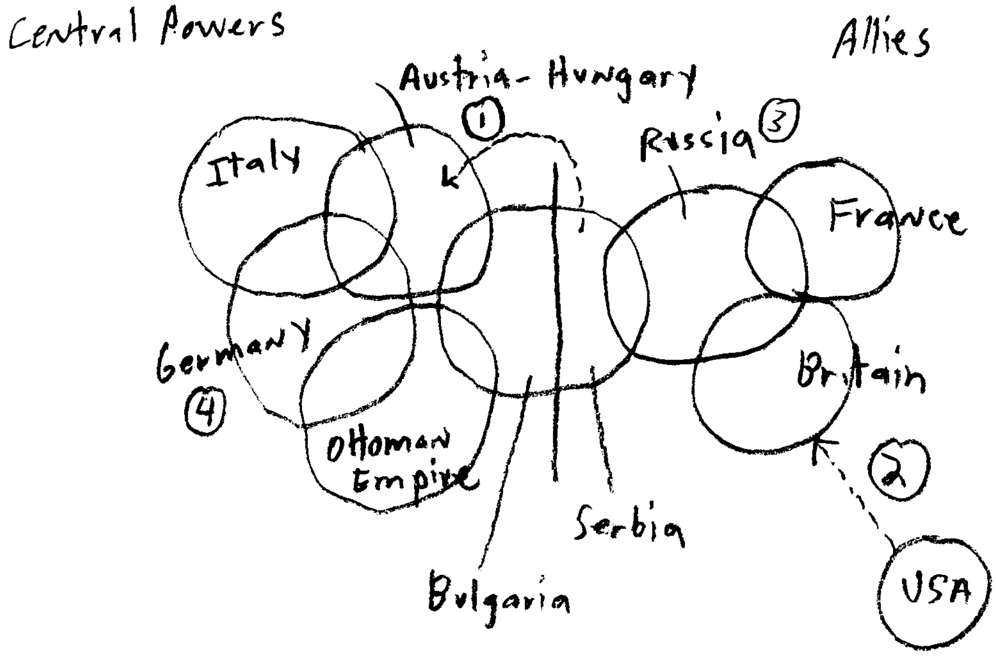
Conclusion

After the crisis nations began to revert to economic nationalism. The era of free trade was over. Germany was the first to create trade barriers in 1879, followed then through cumulative policy causation, by the other countries affected by crisis. England did not however revert to trade economic nationalism, and as we have seen from our study of industrialization, had accumulated the most capital and had the most FDI (foreign direct investment) by the eve of World War I (1913).

In addition, by 1875 all of the countries hit by the crisis had established central banks to prevent what seen as a banking-sector caused crisis. It was thought that central banking could prevent crisis. In the USA the Federal Reserve Bank began operation in 1914.

World War One (1914-1918)

④ Germany nationalized all "Allied" investments in Germany


Central Powers
Allies
Austria-Hungary
①
k
Russia ③
Italy
France
Germany
④
Britain
Ottoman Empire
②
Serbia
Bulgaria
USA

① The "Event" which triggered WWI was when a Serbian Nationalist shot the heir to the Austro-Hungarian Empire, Archduke Ferdinand on June 28, 1914. This led to the Empire making demands upon Serbia which were unmet, leading to war.

② The USA became involved in the war when a German submarine disrupted trade between the USA and Britain

③ The Russian Revolution occurred in 1917, all foreign investments in Russia were nationalized, and the Soviet Union became the first officially declared centrally-planned economy. All trade had to be arranged through the Soviet government.

World War One (cont.)

The Central Powers lost the war in 1918 and the Treaty of Versaille in 1919 outlined the terms of the peace.. Several noted economists (Veblen, Mises, Keynes) noted that the reparation terms placed on Germany were overly– punative and economically unsustainable, and would later only bring crisis. Many believe that the Treaty of Versaille terms is what brought hyper-inflation to Germany in the 1920's, the election of Hitler with his rheotoric of economic nationalism, and, later, his rise to power and the build-up to World War II.

The end of World War I meant the radical restructuring of Europe. The Ottoman Empire dissolved with the last remaining area becoming the Turkey nation-state. The Austria-Hungary empire was broken into the discrete nation-states of Austria, Hungary, Czechoslavakia and Yugoslavia. The Russian empire became Estonia, Finland, Latvia, Lithuania and Poland (and Russia).

The "Inter war" Years

The period after World War I brought upon another era of economic nationalism and strong central governments. This was a period of "corporatism" where strong central governments supported large privately-owned business. This "corporate-state" was most pronounced in Germany (Hitler), Spain (Franco) and Italy (Mussolini).

Strong economic nationalism was also encouraged by the recession of 1920-21 which was due at least in part due to the trade-barriers put in place after WWI.

The war reparations placed on Germany were more than twice the national income of Germany. Because of the tariffs Germany's ability to gain export earnings was limited. The Reichsmark became increasingly devalued to make reparations payments (the Gold standard was replaced by war finance during WWI) leading to hyper-inflation. In 1922 Russia cancelled its requirements for reparations. In 1923 Germany defaulted on payments to France and Belgium leading to French and Belgian troops taking over the German coalmines and railways in the area.

"Interwar Years" (cont.) Return to a (dysfunctional) Gold "Exchange" Standard

In 1925 the World returned to a Gold Standard after the WWI period of war finance. However the UK joined at a its pre-war parity rate, which meant that its currency was over-valued, leading to rapid devaluation, which in turn led to worker unrest due to the high cost of living given England's dependence on foreign trade.

France rejoined the Gold Standard without giving the Finance ministry the right to trade Francs for Gold which meant that the government could not adjust gold flows to support the franc.

And, as stated the German Reichsmark was unsustainable due to the necessary large out-flows of gold to maintain the punative World War One reparation payments.

Finally, the US central bank followed an expansionary monetary policy in the 1920s, fuelling exports to a war-devastated Europe (the US had 50% of the World's trade in the 1920s). This lead to increasing asset values in the World's stock markets. This "bubble" was popped when the Fed tightened the money supply in 1928.

Lecture Notes for Economic History

Timeline for Great Depression

1918 WWI ends

expansion in US agriculture exports to war-devasted Europe

It is seen that Newly-created Fed helped US recover from '20-21 recession and that Central bank can control economy when in fact it was due to ag. export growth.

Recession 1920-1921

Federal Reserve monetary expansion until contraction begins in 1928

M3 ↑ 60%

1928

1929 Stock market Crash

3.2% unemployment

Fed discount rate increases from 3.5% to 6% (almost 100%)

Hoover begins policy of "High-Wage Doctrine", granting monopoly power to employers to set high prices and limit output as long as wages are not reduced

1930 Smoot-Hawley Tariff

Tariffs increase average of 15%

8.9% unemployment

Hoover increases government spending from 16% to 25%

Smoot-Hawley creates retalitory measures abroad. Ag. exports down 33%. unemployment increases in manufacturing due to loss of export markets

1931 England leaves Gold standard US unemployment 15.7%

Hoover creates Reconstruction Finance Corp (RFC) to subsidize bankrupt business and creates Emergence Relief Appropriations

~~1932~~ 22.9%

1932

w ↓ 15%

p ↓ 25%

(real wage ↑ 40%)

real wage up means unemployment increases

Income tax Doubled Highest rate goes from 24% to 63%

1933 24.9% unemployment

F.D. Roosevelt elected President

Enacts Agriculture Adjustment Act (AAA) which guarantees high agr. prices + destroys ag. produce + livestock

National Recovery Admin. (NRA) gives monopoly rights to US Busineses as long as monopoly profits are shared with unions

Roosevelt walks out of London free trade talks

Roosevelt begins tax increases which reach 90% by 1940

US pulls out of Gold Standard and Econ growth begins

1934 21.7%

1935 20.1%

NIRA Declared unconstitutional

Wagner Act gives monopoly bargaining power to unions. Unionization increases 200% from 1935 to 1940

1935-1936 2nd New Deal

WPA, FDIC, NLRA, Medicaire, Medicaide, Social Security Act Wagner Act, FHA, Minimum Wage

France leaves Gold Standard and begins recovery

AAA Declared unconstitutional

1936 16.9%

1937 14.3%

1938 19%

1939 17.2%

unemployment

Opposition Congress elected

"Roosevelt Recession"

Stock market Drops 50%

Fed Reserve Doubles Reserve Ratios, tightening money supply

1940 14.6%

Between 1935-1941 25% of all American families receive income from WPA

1941 9.9%

Pearl Harbor US Joins WW II

1942 4.7%

The Great Depression

In this section we view specifically the Great Depression in the United States. It is commonly accepted that from the Stock Market Crash in October 1929 until the early 1930s when countries began to abandon the dysfunctional interwar gold standard was the Great Contraction. However only the United States, due to political actions taken domestically, experienced a Great Depression which lasted throughout the 1930s eventhough the US pulled-out of the contractionary Gold Standard in the 1930s.

During the period of 1930 to 1940 US economic growth was actually positive, but unemployment averaged 17%, an unprecedented unemployment rate historically. By studying the Great Depression in depth we can learn how government policy which actually attempts to create employment through policy can achieve the exact of its intentions by limiting competition and the extent of the market.

The Great Depression in the USA

The main domestic policies taken by the USA in the 1930s which prolonged the Great Contraction (1929-1933) into the Great Depression in the USA (1929-1941), are,

- The "High Wage" doctrine which was began by President Hoover. Hoover got US businesses to agree not to cut wages by allowing them to avoid competition and keep prices high by limiting output. Because the dysfunctional gold standard meant a deflationary situation for the price level, this meant that the real wage increased. This lead to high unemployment.
- Hoover doubled the government debt from 20% to 40% of National income, this in turn lead to a doubling of the income tax. A higher income tax then led of course to an under-reporting of income (tax avoidance), or, that high earners moved their tax domiciles overseas to less onerous tax regimes. Tax increases continued under Roosevelt, where the highest tax bracket was increased to 90% by the end of the 1930s.
- whereas Hoover's high-wage doctrine was voluntary, Roosevelt, through the National Industrial Recovery Act (NIRA) made high wages and high prices mandatory under law. Those that tried to create competition through the lowering of output prices could be prosecuted by law under the NIRA (however this was declared unconstitutional restraint of trade in 1935).

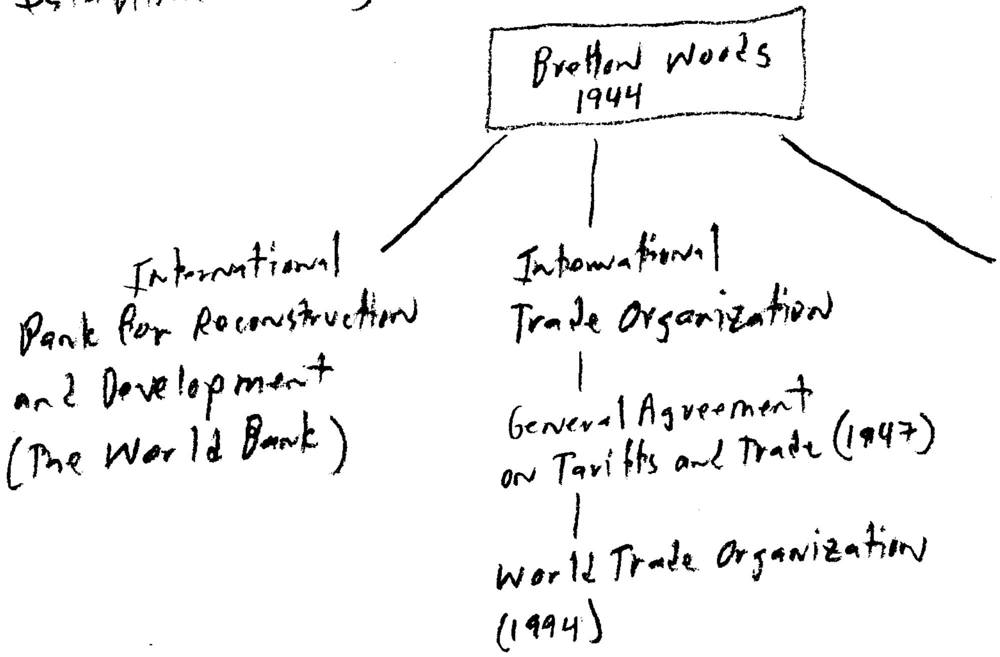
The Great Depression (cont.)

- The high-wage doctrine meant that, given that the money supply was tight and prices were dropping, the real wage ($\frac{w}{p}$) was high. This created a disincentive for employers to hire more workers, causing the prolonged unemployment of the 1930s even while economic growth was positive.
- In addition, for political payback to the unions which supported him in the elections, FDR's NIRA required that the price-fixing of high prices and thus required reduced output to support the high prices-created high profits be shared with the unions. Also, the National Labor Relations Act (NLRA) removed the harm caused by strike actions from civil courts to the administrative court system (from the judicial branch of government to the executive branch). This created labor unrest and work stoppages. Union membership more than doubled in the period between 1935 and 1941. This mass unionization also meant that the cost of hiring workers increased, again adding to the unemployment

- The Agriculture Adjustment Act of 1933 (declared unconstitutional in 1936) was again a political pay-off to the rural south who supported FDR. The AAA guaranteed that agriculture products would demand a high price, and in turn many crops and animals were destroyed to maintain this high price. This meant that those who were unemployed had to pay more for food.
- In 1936 the Federal Reserve Bank doubled the banking reserve ratio requirements, reducing the money supply and decreasing investment activity.
- Due to the NIRA, the AAA, the mass-unionization and the Fed-tightening in the midst of high unemployment, real economic become negative from 1937-1939, again increasing an already high unemployment rate. This period is known as "the recession within the Depression", or, "The Roosevelt Recession."
- It is generally seen that World War II pulled America out of the Depression. This is true only because the limits to the free-enterprise system put in place under the New Deal were replaced by the war economy. Defense spending does not create goods and services which add to the well-being of society, it is government spending for the creation of war. It is only through the removal of impediments to entrepreneurial activity during and after WWII did the USA fully recover to where it was prior to the Great Depression.

Bretton Woods

The foundations for the post-WWII world economic "system" were laid while the War was still continuing. In 1944 in Bretton Woods representatives of the Allies (the Soviets were invited but walked-out of the negotiations) met to re-establish the Gold Standard*. (J.M. Keynes was one of the leading economists who attended the negotiations and who argued for a coordinated international financial "system"). The end result was the Bretton Woods agreements. The system envisioned by Bretton Woods fell apart in 1971 when the USA pulled out of the gold standard, yet the institutions established during Bretton Woods remain with us today.


Bretton Woods
1944
International
Bank for Reconstruction
and Development
(The World Bank)
International
Trade Organization
General Agreement
on Tariffs and Trade (1947)
World Trade Organization
(1994)
International
Monetary Fund
(IMF)

* A goal of Bretton Woods was also to re-establish free-trade, which was curtailed with the Smoot-Hawley Tariff Act in the USA in 1930, which in turn led other countries to reciprocate and raise their trade barriers. By 1935 the level of world trade was where it was in 1900. Prior to the Great Depression the USA accounted for 50% of the world's economy, by the end of the Roosevelt Administration it was 25%.

Bretton Woods. (cont.)

In this section we will critique each of the institutions created under Bretton Woods and view their roles in the World economy through today.

The World Bank

with the Soviet Union pulling out of Bretton Woods in 1944, began in 1945 which might be seen as a division of the World between 'Soviet Bloc' or, Communist countries, versus the 'free' countries of the 'west'. This East-West divide did not occur until the 1950s and 1960s (and which became known as the "Cold War" between the Soviet Bloc and democratic west), however, eventually the World Bank played a geo-political role in the Cold War.

The World Bank, and the development industry in general, uses development projects, planned in conjunction with poor country governments, to try to help a poor country grow economically and to provide public goods such as transportation infrastructure, health and education.

"The Bank" is funded by money given to it by the governments (taxpapers) of those countries which are deemed "rich" countries, mostly countries which are members of the Organization for Economic Coordination and Development (OECD).

Bretton Woods (cont.)

The three main institutions created under Bretton Woods are,

1) The World Bank, which was founded to give 'development' financing to the worlds 'undeveloped' or Non-industrialized countries. It is a development bank which subsidizes 'development projects', funded by the 'rich world' to give to the 'poor' world.

2) The International Trade Organization (ITO) which has developed through today into the World Trade Organization. The WTO sets trade-standards by which member countries agree to certain conditions for trade. Like the English-French agreement in 1860 any signatory gets the most favorable treatment for trade agreed-upon by any country already signed to the agreement.

3) The International Monetary Fund was originally created to support the fixed gold-standard created under Bretton Woods by offering temporary Balance-of-Payments support if any country did not not have enough Gold to support the agreed-upon fixed gold to Ideal currency standard. With the USA pulling-out of the Gold Standard in 1971 the role of the IMF has changed.

Bretton Woods, the World Bank (cont.)

The World Bank has been criticized for using a statist approach to development, projects are planned in cooperation with poor country governments, and for giving subsidized funds to help a country's development, which in turn has been seen to make a country's leadership less accountable to the populace. During the Cold War, the "bank" was used as a tool by the 'west' to buy (give project support conditional upon) votes in the United Nations for support against the Soviet bloc 'east'.

All of the 'rich' countries too have government development agencies, usually part of their diplomatic presence, in 'poor' countries who coordinate their aid programs around the major World Bank goals in that country. There are also other development Banks such as African Development Bank, the Asian Development Bank and the European Bank for Reconstruction and Development (created after the fall of the Soviet Union for 'development' of the ex-Soviet Union countries) all modelled after the World Bank. Very few countries have 'graduated' from aid, the structures set-up more than 60 years ago, despite the relatively recent rapid growth of many 'poor' countries, including India and China who still receive World Bank funding.

Bretton Woods (cont.)

The Word Trade Organization (WTO)

The WTO is the standard-setter for the World's trade. 153 of the world's nations are member's of the WTO, and there are 30 'observer' nations, most of whom would like to join the WTO once they get their rule of law up to par by enforcing agreed-upon copyright protection, reducing subsidies to local businesses (which is seen as unfair competition) and the ability to account for and report-upon the agreed-upon product classification schemes used to account for world trade. 95% of the World's trade is among WTO members.

The WTO since its inception in 1994 (growing out of the initial ITO created under Bretton Woods) holds rounds of talks in attempts to increase trade liberalization. The current round of talks, Doha beginning in 2001, is currently stalled. The main reason that trade liberalization has not advanced is, of course, due to politics. The 'rich' world (as defined, again 60 years ago under Bretton Woods) highly subsidizes its agriculture producers (this is especially true with Japan, the USA, and the European Union) and therefore will not lower trade barriers to 'poor' country agriculture products. The 'poor' countries in turn feel the need to develop their manufacturing industries therefore will not lower their trade barriers to 'rich' world manufactured products. In addition, in particular, the European Union would like to include to include such non-trade criteria in trade talks such as labor and environmental standards, which are being reject (until now) by both the USA and the 'poor' countries.

Bretton Woods (cont.)

International Monetary Fund (the IMF)

As stated, the IMF initially under Bretton Woods was established to facilitate the move to a coordinated, fixed, gold standard after WWII. Each IMF member country (again, the 'west' under the Cold War) agreed to fix their currency to a gold value, and the IMF was to coordinate the international currency and gold flows to maintain this centrally-planned system (through its Bank for International settlements). The IMF was to act as a lender-of-last resort to ensure the operatability and stability of the 'system'. However, in 1971, due to pressures of financing the Vietnam 'conflict' the USA abandoned the Gold Standard so the Bretton Woods gold standard collapsed with the non-participation of the world's largest economy.

Therefore the IMF then assumed two other roles. In the first instance the IMF will lend money to rich countries who are not able to make their payments to other countries, again a lendor last resort role. This happens very rarely, but did happen with a few 'rich' countries during the 2008 financial crisis. The other role the IMF has assumed is as gate-keeper to the World Bank for its development projects. The IMF certifies that a poor country has a rational fiscal and monetary policy before that country can receive aid from the World Bank.

Bretton Woods, IMF (cont.)

The IMF gives technical advise to developing countries (on condition of getting World Bank and other aid) and tells them how to improve their fiscal management. This oftentimes includes the need to reduce subsidies and raise taxes.

In addition the IMF "bails-out" poor countries if they have an IMF agreement by previously having met IMF demands for rational fiscal policy. For example if a country borrows money on the international debt market, usually from large international banks, and cannot for some economic or political reason, make the payments and defaults on this debt, the IMF can step in and make the payments instead. This policy has been criticized, like all bail-outs, for rewarding bad behaviour (in this case not paying agreed-upon debts), which removes to some degree the accountability of governments who are subsidized by the IMF. This structual support of bad behaviour is known as "moral hazard". The economist James Buchanan won the Nobel Prize in 1986 for his 'public choice' economics by showing how bureaucracies continue-on and grow despite perhaps outliving their useful lives because the people who work for those institutions have the incentives to perpetuate and grow the institutions.

The European Union

Since the Collapse of the Bretton Woods Gold Standard in 1971 the World has been essentially 'dollarized', with the fiat US $ being the international reserve (hard) currency of choice, the unit of account for international commodities (gold, oil, corn, wheat, steel, etc.). However, beginning in 2007 the European Union "Euro" currency is growing in competition against the dollar (2007 is marked as this date because that is when the Chinese central bank began to hold Euros in addition to dollars as its reserve currency).

The European Union of today is approximately the same geographic boundaries as what is known in economic history as the Medieval Economy, and includes the British Isles and Continental Europe (including Russia west of Ural mountains. Russia is not a member of the EU, but western Russia is considered historically as part of Europe).

Political and economic coordination for Europe began after WWII with the Mashall Plan in 1948 when the United States required a coordinated plan on condition of its aid to reconstruct Europe after the war, this was the Organization for European Economic Coordination (OEEC).

The European Union (cont.)

Today's European Union, which has free-trade and (mostly) free migration of member nations began with the European Coal and Steel Community established in 1951 which harmonized (lowered) tariffs and trade restrictions for these essential industrial inputs to production, the steel and coal agreements then evolved into the European Free Trde Area. Meanwhile the European Economic Community political grouping became the European Community, the forerunner to today's European Union.

The "Lisbon" treaty was signed in November 2009 by the 27 EU member countries. The Euro currency was introduced on Jan. 1, 2002 after years of planning, replacing the domestic currencies of those that joined the Euro common currency,* not all members of the EU have adopted the € (euro) as its currency. On any given day, depending on the exchange rate, the monetary base of Euro can be larger than the monetary base of the U.S. dollar ($).

* including Greece, replacing the longest continuing existing currency unit, the Greek Drachma.

The European Union, the Euro (€) (cont.)

The "maastricht" treaty put strict limits (conditionality) on countries who wish to adopt the Euro in order to ensure that currency union was credible and rational. Prior to adoption of the Euro, in general, the northern European countries (including of course the 'early adopters" of industrialization) tended to have more stable and sound monetary and fiscal policies than the Southern (and later, with the fall of the USSR, central and Eastern) European countries. Germany was and remains the dominant nation economically in the EU.

Strict criteria for joining the currency union were put in place to prevent less fiscally-prudent countries from "free-riding" on more well-managed economies. With a common monetary policy, dominated by a strong German economy and well-managed German state, smaller countries would lose the incentive to have rational fiscal policy because they no longer had a local national currency which would take the inflationary brunt of poor fiscal management. because the Euro would be stronger (held-up in comparison to other currencies) than a local currency.

The European Union, the Euro (cont.)

Despite the maastricht agreement, and as might have been predicted, in recent years certain countries have violated the maastricht conditions after joining the €-zone, running larger-than-agreed upon deficits. The market has adjusted for this eventuality and bond rates for €-member countries do differ (based on expected default risk and local inflationary conditions) despite all the country bonds being denominated in Euros.

The maastricht conditions were (are, as EU countries and those wishing to join the EU and the €-zone must meet the conditions):

- The government deficit (G-T) must be less than or equal to 3% (e.g., $\frac{G-T}{Y} \leq 3\%$) of national income for three years.
- The inflation rate must not be greater than 1 ½ % of the least deflationary country in the €-zone (this country is usually Germany)), again, for three years. For example if Turkey does join the EU and then wishes to join the €-zone, and Germany's inflation rate is 3%, then, Turkey's inflation rate must be less than 4 ½ % for three years in order to join €-zone.

The European Union (cont.)

Lastly the EU Common Agriculture Policy (CAP) must be mentioned. The CAP is the EU's policy of subsidizing farmers throughout the region. It is both because of the CAP, and because of the USA's and Japan's subsidization of their farmers that the free-trade sought under Bretton Woods has been stalled. World Trade Organization (WTO) standard for free-trade exclude these mercantilist policies. In addition as noted earlier under the Bretton Woods section of these notes, many "poor" countries have mercantilist policies for their manufactoring sectors, again, placing limits on world free-trade.

China and India

As stated, Bretton Woods created a structure of classifying countries as developed ("rich") and developing ("poor"), with the Soviet Union pulling out of the "western" Bretton Woods system. Perhaps as a self-fulfilling prophecy, China and India then, shortly after Bretton Woods, declared themselves "communist" and "socialist" respectively. However, today, after concentrated liberalization of their economies, China and India have been growing at twice or three times those countries deemed "rich" at Bretton Woods. Adam Smith wrote in "Wealth of Nations" (1776), that perhaps what is most important is a country's growth, not necessarily its current level of income. The populations of India and China together make-up more than 35% of the world's population, while the population Europe (including Russia west of the Ural Mountains) and the USA combined is only approximately 20% of the world's population. It should be noted however that we should not under-estimate the poverty still extent in both India and China despite years of very high economic growth. When starting at a low base productivity-enhancing investment, and thus growth, is more achievable than when starting at higher levels of factor investment. Per person income and wealth in India and China are still a fraction of that in the "west".

China and India (cont.)

China

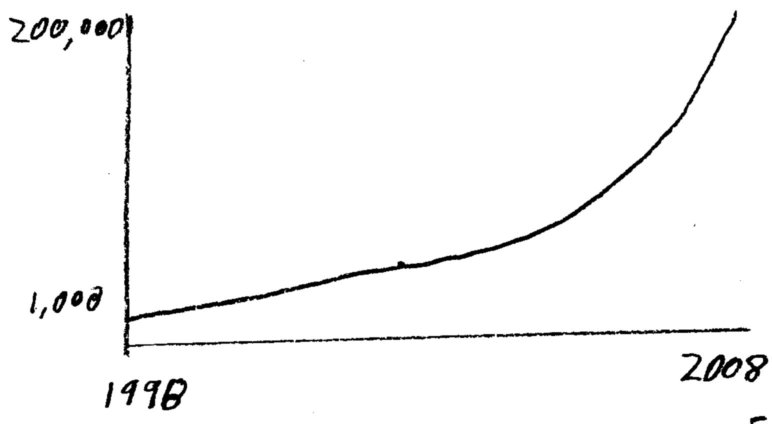
As is well known, Mao led China's communist revolution against the nationalists (who originally unified the country in the modern age and whose leadership then fled to the island of Formasa (now Taiwan)) in 1949. China began it's economic liberation in 1979 with it's Joint Venture Law. The law was an attempt to attract foreign investment (foreign capital, technology and entrepreneurial skill), however the Law stipulated that majority ownership had to be with a Chinese partner. As liberalization increased, Full FDI (foreign direct investment) was authorized and China established a stock exchange in the early 1990s. In 1985 Government Sponsored Enterprises (GSEs) were greater than 50% of the economy, today GSEs are less than 15%. From 1949 to 1978 there was only one bank in China allowed by law, the Peoples Bank of China (the central bank). Today there are foreign owned banks, however, as we shall see, monetary policy has not been liberalized because there is not free-trade in foreign currency.

China and India; China (cont.)

It might be said that China practices a mercantilist monetary policy. All foreign exchange is monopolized by the central bank, which keeps reserves of dollars and Euros, and dollar- and €-denominated assets in excess of $2 trillion. In order to do this the bank surpresses the value of the local currency, the Yuan, in order to keep the value of Chinese exports under-valued in the world market. This, of course helps manufacterors producing for export at the expense of the purchasing power of the general Chinese population.

China has also begun to become technologically-innovative in addition to adopting technology through FDI. In 2008 China issued more than 200,000 patents, and as a member of the WTO it has obligated itself to respect the internationally-agreed upon patent process

# of Patents Issued in China *



* source: "The Economist" magazine

China and India (cont.)

India

Upon independence from the British Empire, India declared itself "socialist" in 1947. Economic liberalization began in India in the late 1980s and early 1990s, and like China it is the growth of the private sector versus that of the public sector which has contributed to it's high growth rate during this period. India still has foreign exchange controls and conducts a somewhat mercantilist policy towards FDI, allowing full foreign ownership in some sectors but not others. India too has, since the 1990s, conducted a policy of privatization of GSEs. India has also made a concerted effort to remove economic growth-inhibiting subsidies on food and energy, but due to the relatively decentralized nature of India's political economy, some states have not followed or enforced this legislation. Because English is the language of the educated populace, India has attracted FDI (some call it "outsourcing") and indeed has outsourced some of its manufacturing to China.

The lack of adequate energy infrastructure in both China and India is placing a limit on the upward side of economic development and has become a priority for both countries.

We can view the Post-World War Two economy from a "structural" point of view by dividing the time period up to, and then after, the break-up of Soviet Union. In economies we call the major trends for each period "stylized facts" or "generalized tendencies" which can describe generally each period although perhaps do not hold true in all places and at all times.

1948 Build-up of the Welfare State in the industrialized World
Cold War "Peace"
End of European colonization
From the Gold Standard to "Dollarization"
Beginning of Second Age of "Globalization" (the first being the Free Trade Era after abolishment of Corn Laws in England and Franco-English trade treaty of 1860)
1990

1991 Break-up of Soviet Union and "Balkanization" of Central Europe
USA as "World's Policeman"
Growth of India and China
Euro as Competition Against the Dollar
Digital Revolution
Container Shipping Revolution
Financial Crisis of 2008 and "Great Recession"
Today