International Economics: Lecture 18
International Monetary System

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Gold Standard
1880 -1914

Happiness resides not in possessions, and not in gold, happiness dwells in the soul.

Democritus

The Gold Standard

Central bank:

- set a fixed gold price: *Mint parity*.
- bought and sold gold in *unlimited quantity* at the mint parity price.

⇨ As mint parity was almost never changes, there was no expectation for change and the system enjoyed full trust by all.

⇨ Domestic money supply is proportional to gold holdings.

Under this system exchange rates were FIXed.

1 pound = 7.322382 grams of gold

1 dollar = 1.50463 grams of gold

1 pound = \$4.86656 ≈ \$4.87 ***(mint parity)***

Cost of shipping 1 pound worth of gold between NY and London was 3 cents.

\$4.84 < 1 pound < \$4.9

The Gold Standard

$\$4.84 < £1 < \$4.9$

No one would buy £1 by more than $4.9, as

- she/he could always buy $4.87 worth of gold from US Treasury
- ship it to London at a cost of 3 cents
- and exchange it for £1 at the Bank of England.

⇨ $4.9/£1 was the ***gold export point*** of the U.S.

Also no one would buy £1 by less than $4.84, as

- she/he could always buy £1 worth of gold from Bank of England
- ship it to NY at a cost of 3 cents
- and exchange it for $4.87 at the US Treasury (receiving $4.84 net).

⇨ $4.84/£1 was the ***gold import point*** of the U.S.

The Gold Standard

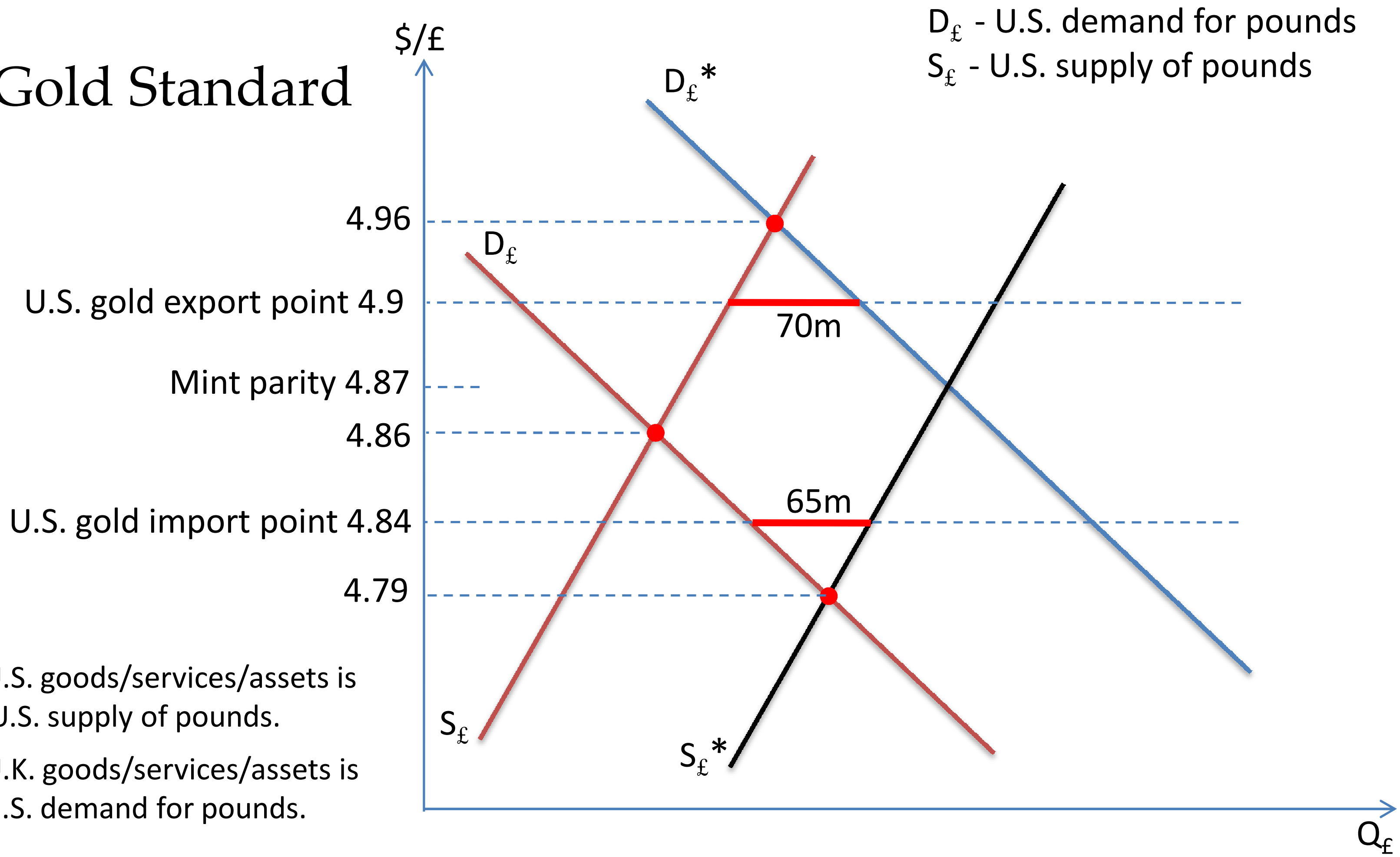
Dollar ***depreciation*** (£1 > $4.9) was countered by ***gold export*** from U.S.

Gold outflow = U.S. BOP deficit

Dollar ***appreciation*** (£1 < $4.84) was countered by ***gold import*** to U.S.

Gold inflow = U.S. BOP surplus

The Gold Standard



- Demand for U.S. goods/services/assets is the source of U.S. supply of pounds.

- Demand for U.K. goods/services/assets is the source of U.S. demand for pounds.

- With $D_£$ & $S_£$ equilibrium rate is \$4.86 (no gold flow, and U.S. BOP is in equilibrium).
- With $D_£^*$ & $S_£$ equilibrium rate is \$4.96 under pure floating. But under the gold standard 70m worth of gold will outflow, which is equal to U.S. BOP deficit.
- With $D_£$ & $S_£^*$ equilibrium rate is \$4.79 under pure floating. But under the gold standard 65m worth of gold will inflow, which is equal to U.S. BOP surplus.

Price-specie flow mechanism

In BOP surplus countries

- money supply ↑
- domestic price level ↑
- export (goods & services) competitiveness ↓
- BOP surplus will self-adjust.

In BOP deficit countries

- money supply ↓
- domestic price level ↓
- export (goods & services) competitiveness ↑
- BOP deficit will self-adjust.

Price-specie flow mechanism

The Bretton Woods System

1. U.S. maintained fixed gold price at $35 per ounce.
2. Without restrictions U.S. exchanged gold with dollar at that rate.
3. *Fixed par values*: All other nations fixed their currencies against dollar.

±1%: Countries should keep their currencies within ±1% band by intervening.

Countries could change their par values only in a case of **fundamental disequilibrium** (usually understood >10% change).

The Bretton Woods System

Though in case of **fundamental disequilibrium** countries may change their par values, but in reality industrial nations were reluctant to do so.

Deficit nations avoided devaluation, as politically it was problematic.

Surplus nations avoided revaluation, as they preferred to accumulate reserves.

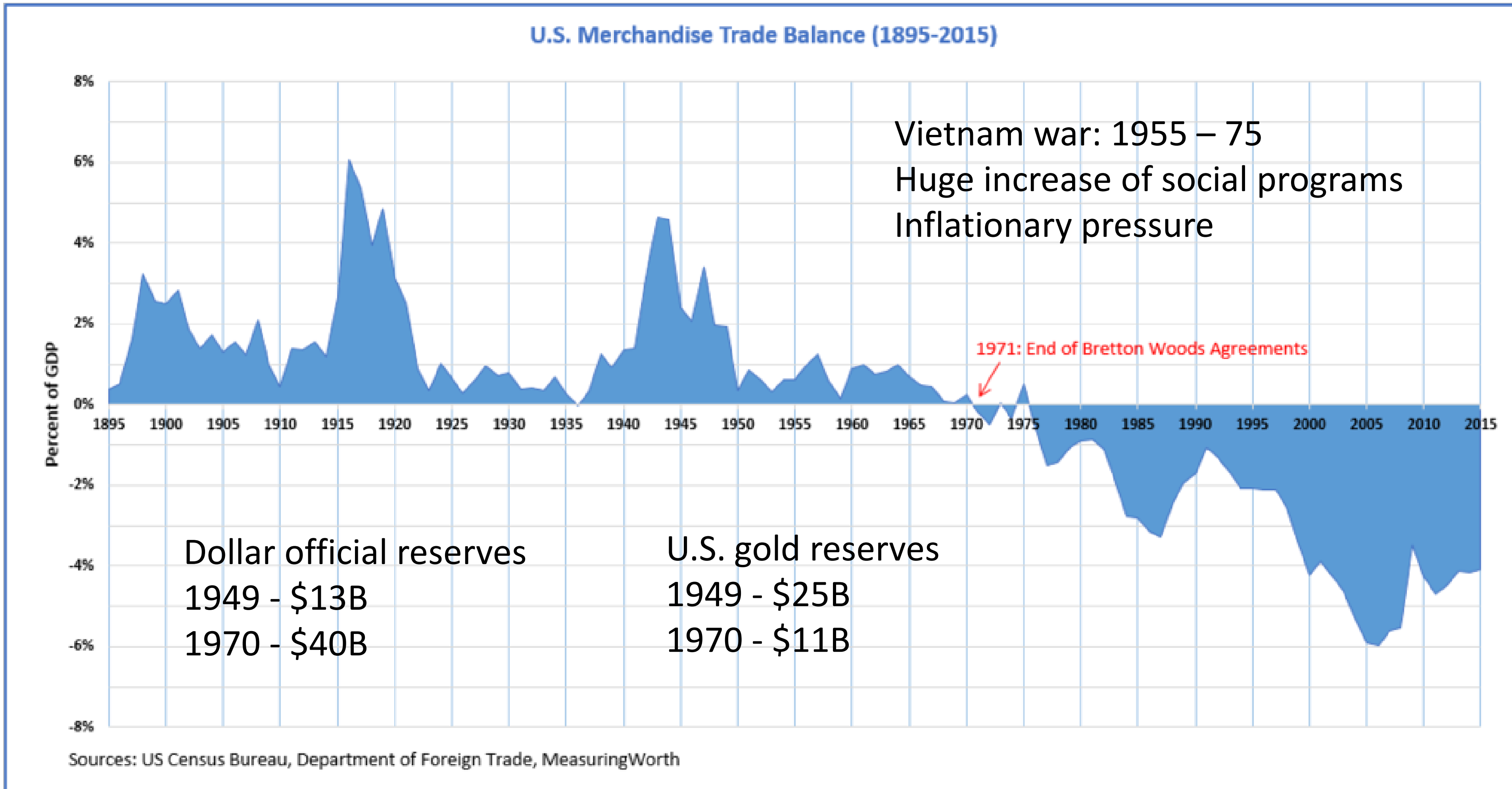
UK	1967	devaluated
France	1957, 1969	devaluated
Germany	1961, 1969	revaluated

U.S., Italy, Japan NEVER changed par value (Canada: free float, 1950 – 1962)

✓System lost its flexibility, and ability to fix BOP imbalances.
✓System became prone to ***speculative attacks***.

The system collapsed in August 1971.

Collapse of the Bretton Woods System



Vietnam war: 1955 – 75
Huge increase of social programs
Inflationary pressure

Dollar official reserves
1949 - $13B
1970 - $40B

U.S. gold reserves
1949 - $25B
1970 - $11B

Triffin dilemma

In 1960 Robert Triffin exposed a fundamental problem.

U.S. BOP deficits are necessary for world economy to grow, as
- it is the source of additional reserves,
- liquidity accumulation.

But U.S. deficits erode confidence in dollar.

Without confidence, the dollar would no longer be accepted as the world's reserve currency, and the system will collapse.

Classification of exchange rate arrangements

1. No Separate Legal Tender

Another currency is the sole legal tender (formal dollarization)

- complete surrender of monetary policy independence.

Ecuador, El Salvador, Panama, Zimbabwe, Montenegro, San Marino

2. Currency board

Commitment to exchange with a foreign currency at a fixed rate.

- restriction on issuing local currency,
- no scope for discretionary monetary policy

Hong Kong (1983, HK$7.8), Bulgaria, Dominica, Grenada

3. Conventional peg

Country formally pegs its currency at a fixed rate, but the commitment is not irrevocable.

Bahrain, Barbados, Jordan, Oman, Qatar, Saudi Arabia, UAE, Turkmenistan (manat in 2015 from 2.85 to 3.5 per $).

Classification of exchange rate arrangements

3. Stabilized arrangement
Spot rate remains within a margin of 2%
Singapore, Vietnam, Macedonia

4. Crawling peg
The currency is adjusted in small amounts at a fixed rate or in response to changes in other parameters. The rules are public.
Nicaragua, Botswana

5. Crawl-like arrangement
The rate remain within a margin of 2% relative to a trend
Honduras, Jamaica, China, Ethiopia, Uzbekistan, Argentina, Belarus

6. Floating and Free floating
Ukraine, Georgia, India, Brazil, Turkey
EMU, U.S., U.K., Canada, Mexico,

World gold official reserves

as of March, 2017

	Tonnes
1. U.S.	8,134
2. Germany	3,378
3. IMF	2,814
4. Italy	2,452
5. France	2,436
6. China	1,843
7. Russia	1,645
8. Switzerland	1,040
9. Japan	765
10. Netherlands	613
11. India	558
12. ECB	505

	Tonnes
14. Turkey	411
17. U.K.	310
21. Kazakhstan	260
27. Singapore	127
48. Belarus	41
64. Tajikistan	14
100. Mongolia	2

source: World Gold Council

Thank you and take care,

but remember

Education without values, as useful as it is, seems rather to make man a more clever devil.

C. S. Lewis