# CHINA IN THE MODERN INTERNATIONAL MONETARY SYSTEM

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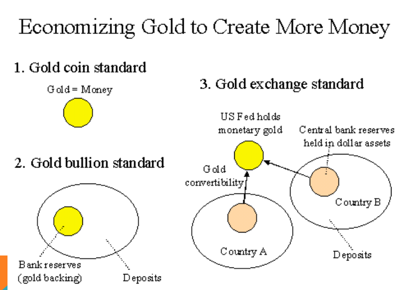
## WHAT IS A CURRENCY GOLD STANDARD?

- Beginning with Britain in 1821, many European countries had monetary systems on the gold standard, except Asia and Latin America (silver). Most of Europe followed in the 1870s. Japan (1897), Russia (1898), and the US (1900) would eventually join this international system of *commodity money*. Other systems were the *silver standard* and the *bimetallic standard*.
  - Gold coin (specie) standard: actual gold coins in circulation
  - Gold bullion standard: convertible into actual gold bars
  - Gold exchange standard: guarantees a fixed exchange rate to a currency backed by gold
- McKinley passed the Gold Standard Act soon after winning re-election in 1900 (though the Coinage Act had created the *de facto* standard in 1873). He was shot 6 months later.
- Value of gold in 1900 set to $20.67/oz.
- Because countries on the gold standard used currency based on the same commodity, capital mobility was high. Currency exchange controls were largely unnecessary.
- Many people blame the Great Depression on the post-war return to the gold standard (Keynes had predicted that it would be deflationary), leading to the US and Canada abandoning the standard in 1933.

## 3 TYPES OF GOLD STANDARDS




## WHAT IS BRETTON WOODS?

1944 – Allied powers go to New Hampshire to negotiate a post-war international monetary system that would discourage the protectionism and trade blocs that characterized the Depression era. The result is the Bretton Woods Agreement.

The Bretton Woods System (BWS) is a “gold exchange standard” or “international dollar standard” where the US dollar serves as the intermediary between other international currencies and gold.

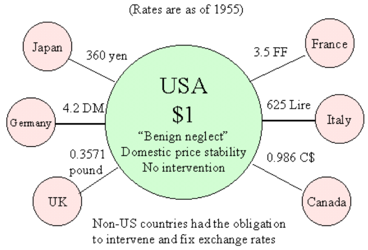
“Sister organizations” created by the agreement:

- World Bank
- International Monetary Fund (IMF)
- GATT => World Trade Organization (WTO)

Until its demise with the Nixon Shock, the system was largely successful in its achievement of unprecedented macroeconomic growth and stability across the world.

## Bretton Woods: US Dollar at Center

(Rates are as of 1955)




## THE "NIXON SHOCK"

**The fatal flaw in the Bretton Woods System (BWS) was its reliance on American politicians.**

**With the intensification of Cold War expenses (space race, arms race, Vietnam) and the creation of the American welfare state, government spending soared. Soaring trade deficits and intense inflation followed for the US. However, artificial demand for the dollar created by the BWS allowed interest rates to remain lower than they otherwise would be.**

**May 1971 – West Germany leaves the BWS. The mark appreciates 8% in 3 months, leading to requests by Switzerland and France to redeem vast amounts of dollars in their official reserve accounts for gold.**

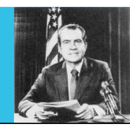
**August 9, 1971 – Switzerland leaves the BWS due to dollar depreciation.**

**August 15, 1971 – Nixon "shocks" the world on TV announcing the US break-up of BWS:**

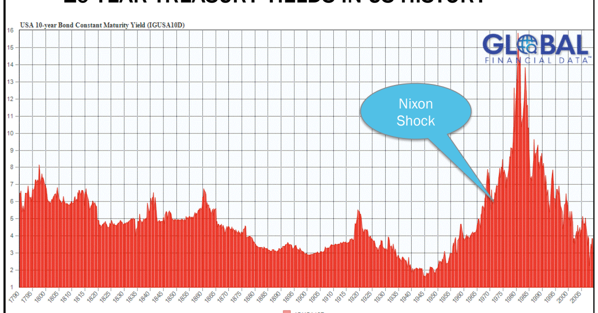
- Ceased the direct convertibility of dollars into gold
- 90-day freeze on prices and wages
- Imposition of 10% import tax

Nixon's Busy Summer

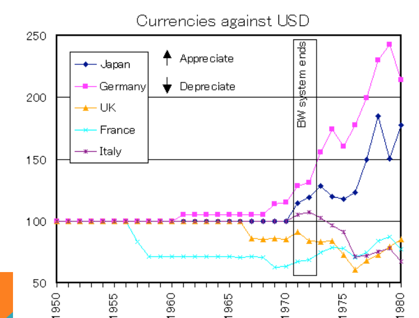
*Exactly one month earlier, Nixon had announced his intention to visit the PRC in February 1972, effectively ending the isolation of Communist China.*



## 10-YEAR TREASURY YIELDS IN US HISTORY

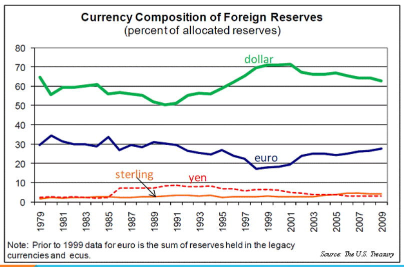



## POST-BRETTON WOODS




*The collapse of the Bretton Woods system unleashed international currency volatility (and arbitrage opportunities!).*

## THE DOMINANT DOLLAR




*The Bretton Woods System established USD as the de facto reserve currency, a position which was only strengthened by the US tech boom of the 90s and still remains today.*

## WHAT IS FIAT MONEY?

*Fiat* is defined as "a command or act of will that creates something without or as if without further effort." Its closest synonyms are *dictate* or *decree*. It is derived from the same Latin word as *fate*.

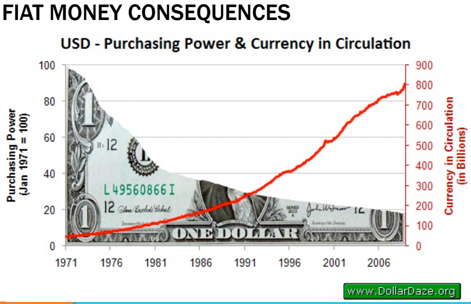
*Fiat money* implies paper currency that cannot be converted into another commodity or asset (gold/silver or even exchange reserves) of equivalent value.

Both its value and its supply is determined by government order and is thereby made a legal instrument for financial transaction purposes.

It is the basis of the ENTIRE modern monetary system.

Its real value is determined SOLELY by market forces of supply and demand.


## FIAT MONEY CONSEQUENCES




*Of course it is a lot easier to put money into circulation when you can simply just create it out of thin air!*

## MONEY SUPPLY

Narrow money + Broad money

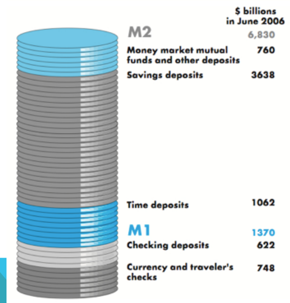
$\underbrace{M0 + M1}_{} + \underbrace{M2 + M3 + M4}_{}$

- M0: Physical Currency *in circulation*
- M1: M0 + demand/checking deposits + travelers checks
- M2: M1 + savings deposits + money market + CD<$100k
- M3: M2 + large-denominated CDs & money market + repos
- M4: M3 + Commercial Paper + T-Bills (treasury borrowings under 1 year)

<u>Treasury Nomenclature</u>

T-Bills (< 1 yr) | T-Notes (1 – 10 yrs) | T-Bonds (> 10 yrs)

## THE STACK OF MONETARY ASSETS




## MONETARY EXPANSION

Monetary Base (MB): *Not to be confused with money supply.*

- M0 + Vault Cash + Federal Reserve deposits (both required & excess)

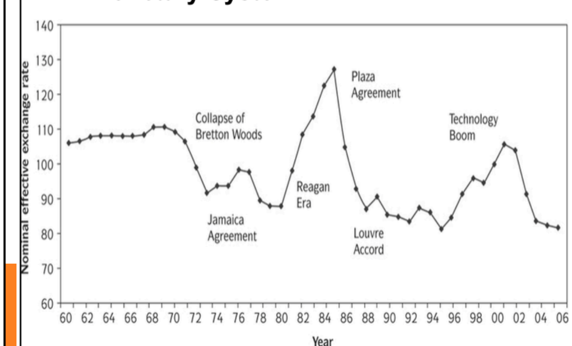
Money Multiplier: The maximum amount of commercial bank money that can be created by one unit of central bank money.

- M1 / MB
- 1 / RR

Reserve Requirement: The minimum fraction of customer deposits that a central bank requires a commercial bank to hold as reserves against loss (if a loan goes sour).

These concepts are integral to a *fractional reserve banking system* i.e. we do not need a 1:1 ratio of assets to loans because, ideally, depositors will not all simultaneously demand their deposits. However, to prevent bank runs, the government should act as a lender of last resort, hence the FDIC (or FNMA) where the US (implicitly) guarantees repayment.

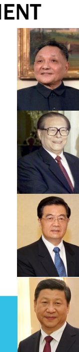
## Contemporary History of International Monetary System

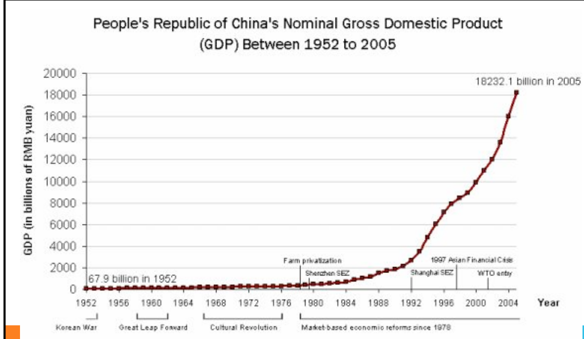



## STAGES OF CHINESE ECONOMIC DEVELOPMENT

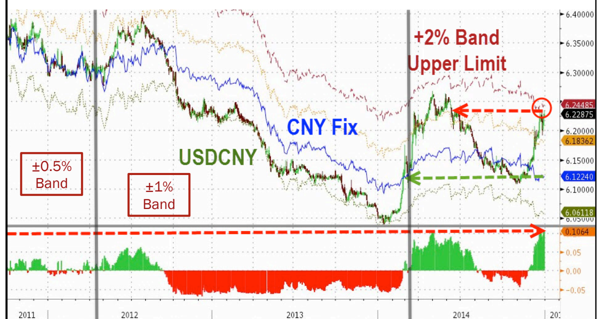
### After "opening up" (开放以后)

- First stage (1978 – 1991) *roughly corresponds to Deng Xiaoping era*
  - Cyclical economy dominated by SOEs
  - Tremendous political swings
- Second stage (1992 – 1999) *Jiang Zemin era is ~1993 – 2003.*
  - Explosion of private enterprises due to huge inflows of IFDI
  - Export-based economy
- Third stage (2000 - ??) *Hu Jintao (2002 – 2012) & Xi Jinping (2012 - )*
  - Stable, seemingly endless growth established
  - Innovation encouraged in certain private sectors
  - Cluster approach to economic growth






## 慢慢来 PROGRESSIVISM / GRADUALISM




## QUESTIONS FROM THE BRAMALL READING

Given these eras of China's *kaifang*, what does Bramall say about the correlation between trade/FDI and Chinese GDP growth?

What is the strategy of the "four alongs"?

What is an autarky?

What happened to Dongguan?

Express China's success in the 1990s in terms of value chain.

What was the last year of China's oil self-sufficiency? Coincidence?

What is the "floating population" and why does it exist?

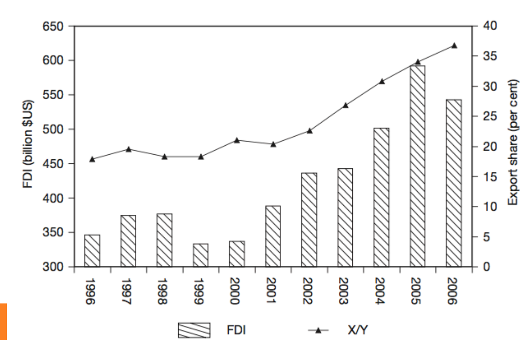



*Figure 11.4* Trends in foreign direct investment and the share of exports in GDP, 1996–2006 (Source: ZGTJNJ (2007: 57 and 742).)

## WHAT IS AN SEZ?

SEZ = Special Economic Zone

1978 – 3rd Plenary Session of 11th Communist Party of China (CPC) Central Committee puts forth this concept as the initial stage of its plan for "opening up" China's centrally-planned economy.

1980 – Shenzhen (SZ) is the most prominent of the 4 cities designated as testing cities for the SEZ concept. Unlike Shantou & Xiamen (Amoy), which were prominent "treaty ports", & Zhuhai (the Macao equivalent to SZ and the Portuguese were much cozier with their Chinese neighbors), Shenzhen was not a city prior to SEZs.

1984 – The SEZ concept was expanded to 14 other prominent coastal cities.

1988 – Existing SEZs were expanded.

1992 – Pudong New Area in Shanghai was established as an area to accept FDI and with the intention of creating a modern financial hub for New China. At the same time, the CPC created the concepts of free-trade zones (FTZ) and high-tech development zones to further accelerate growth in even more new areas.

## SHANGHAI 1990 V. 2010

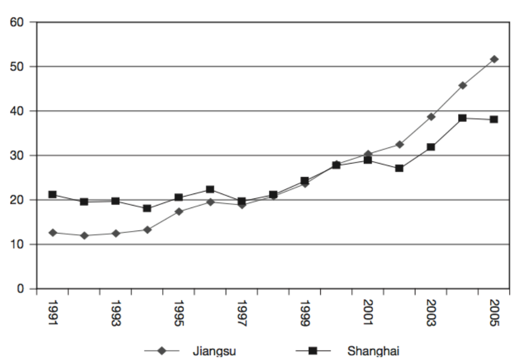
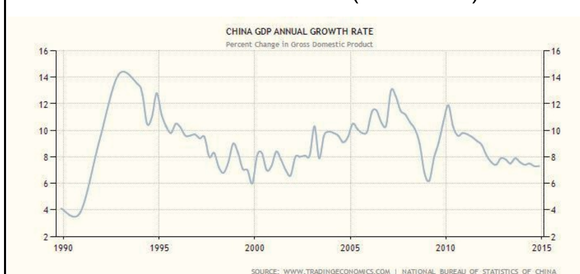
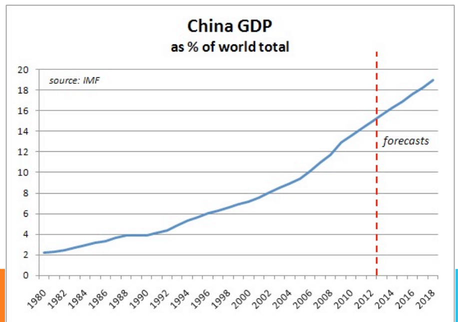


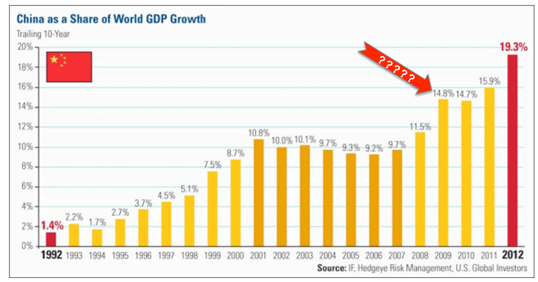

*Figure 11.5* Ratio of the value of exports from Jiangsu and Shanghai to those of Guangdong, 1991–2005 (per cent) (Sources: ZGTJNJ (2006: 749); SSB (2005a: 390, 424 and 730).)

## CHINA'S GDP GROWTH RATE (1989-2015)



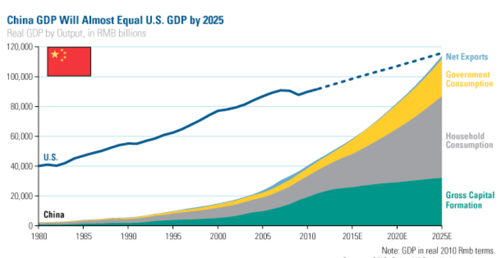
## QUITE IMPRESSIVE…



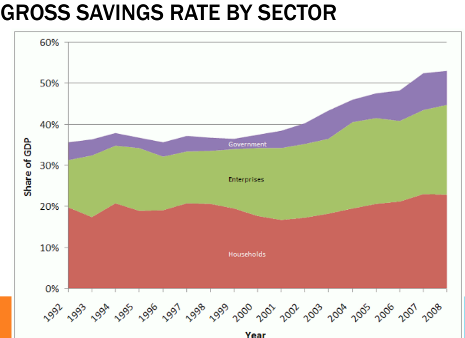




"China's GDP growth rate reached 9.1 percent in 2009, and its contributions to global economic recovery exceeded **50 percent**." –Chen Yulu

*This is your first lesson in Chinese economists overstating their case. –Prof K*




## GROSS SAVINGS RATE BY SECTOR




*Compare this chart to the one in the Chen book on p. 36.*

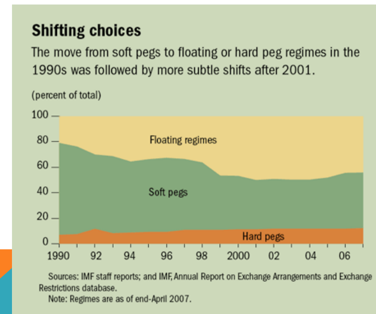
## WHAT ARE EXCHANGE RATE REGIMES?

1. **Hard exchange rate pegs** Fixed
   - Currency Substitution: (a.k.a. full or partial dollarization if using USD) The use of another country's currency in parallel or instead of the domestic currency
     Ex. Panama, Cambodia, Ecuador
   - Currency Board: Legal mandate that requires the central bank to keep foreign assets at least equal to local currency in circulation and bank reserves.
     Ex. Hong Kong, Bermuda (USD) Bulgaria, Denmark (EUR) Brunei (SGD)
2. **Soft exchange rate pegs**: Currencies that maintain a stable value against a single currency or a basket of currency
   Ex. Costa Rica, Hungary, China, Russia Managed
3. **Floating exchange rate regimes**: Market-determined. Central banks may intervene (though prefer not to) to manage extreme short-term fluctuation.
   Ex. New Zealand, Sweden, Iceland, the United States Floating

*IMF definitions of exchange rate systems.*

*More common ways to refer to exchange rate systems.*

## GLOBAL DISTRIBUTION OF EXCHANGE RATE SYSTEMS




## RUSSIA'S MANAGED FLOATING EXCHANGE RATE

**This figure is straight from the Bank of Russia website and outlines a practice that:**

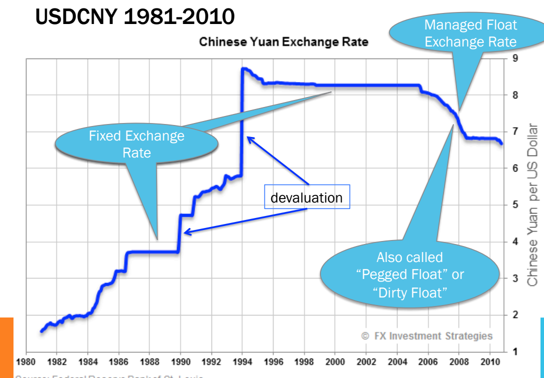
1. *Is "aimed at smoothing the rouble exchange rate volatility".*
2. *Is based on a currency basket where "the rouble value of the dual-currency basket consists of 45 eurocents and 55 cents".*
3. *Defines a policy mechanism where "the closer the value of the dual-currency basket to the lower (upper) bound of the floating operational band the larger the amounts of the Bank of Russia FX purchases (sales) of the foreign currency".*

**Figure 1. The parameters of the Bank of Russia FX policy mechanism**
**(as of the 30 September 2013)**

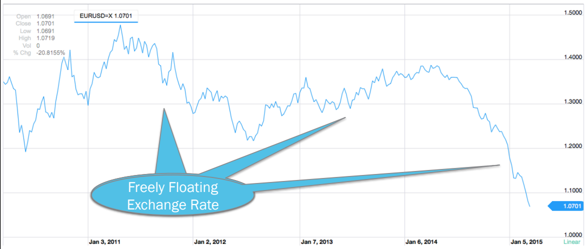
| | The width | The volume of interventions, aimed at smoothing the volatility of the rouble exchange rate*, million USD per day |
|---|---|---|
| 39.25 RUB | | Upper boundary of the corridor |
| | 1 RUB | -400 |
| | 1 RUB | -200 |
| | 1 RUB | -70 |
| "neutral" range | 1 RUB | 0 |
| | 1 RUB | 70 |
| | 1 RUB | 200 |
| | 1 RUB | 400 |
| 32.25 RUB | | Lower boundary of the corridor |

* «+» – the Bank of Russia FX purchases, «–» – the Bank of Russia FX sales

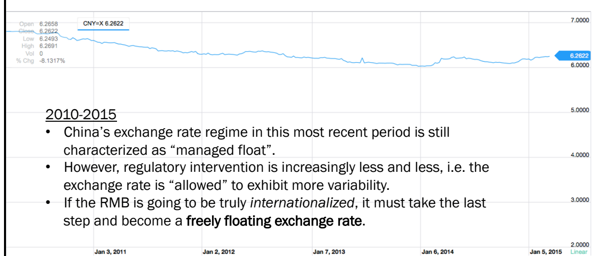
## USDCNY 1981-2010



## EURUSD

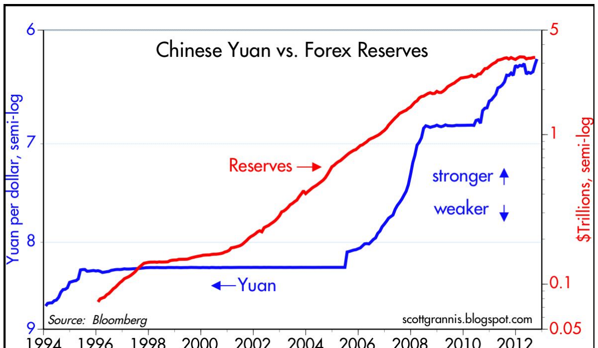



## USDCNY 5-YEAR CHART




2010-2015

- China's exchange rate regime in this most recent period is still characterized as "managed float".
- However, regulatory intervention is increasingly less and less, i.e. the exchange rate is "allowed" to exhibit more variability.
- If the RMB is going to be truly *internationalized*, it must take the last step and become a **freely floating exchange rate**.




*Here we see a direct correlation between the accumulation of FX reserves (mostly USD) and currency value.*

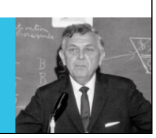
## TRIFFIN'S DILEMMA

Robert Triffin was a Belgian economist who anticipated the structural flaws in the Bretton Woods System, testifying as such before Congress in 1960. Eleven years later, the summer leading up to the Nixon Shock proved Triffin correct.

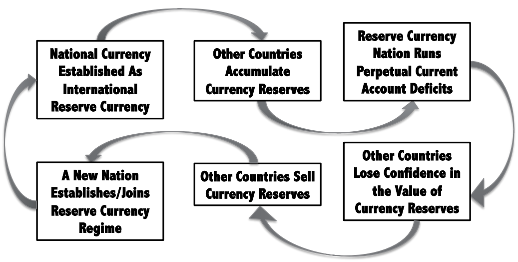
Essentially, the Triffin Dilemma is a monetary paradox. In a Bretton Woods world, foreign countries amassed USD reserves because they were backed by gold, which led to a US current account deficit. However, such a deficit by definition eroded confidence in the value of the USD reserves, sparking a run on the US central bank as international central banks believe the USD to be overvalued.

ANY national currency, if it is a largely accepted international reserve currency will suffer this fate.

PBOC governor Zhou Xiaochuan, invoked the Triffin Dilemma when discussing the global financial crisis in 2009, claiming that Bretton Woods should have incorporated Keynes' "farsighted" proposal to adopt the *bancor* as THE international reserve currency because even a "basket" currency approach (like SDR) will still encounter Triffin's Dilemma to some degree (because it involves national currencies).



## TRIFFIN DILEMMA APPLIES TO ANY NATION

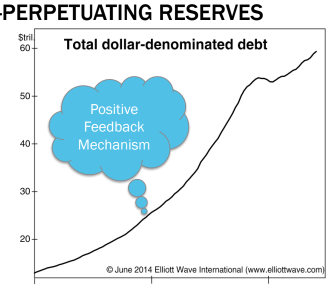



## +/− ASPECTS OF RESERVE CURRENCY STATUS

+ A tremendous positive for achieving reserve currency status is *seignorage*. Current account deficits must, by definition of the balance of payments equation, be counterbalanced by issues of sovereign debt. With respect to the US, seignorage means that more and more Treasuries can be issued at better and better terms (lower and lower rates with longer and longer maturities) as the market becomes more liquid (i.e. the more debt that is issued). Although positing that high debt is, in fact, good is very counterintuitive, seignorage has a *positive feedback mechanism* that is difficult to stop once started.

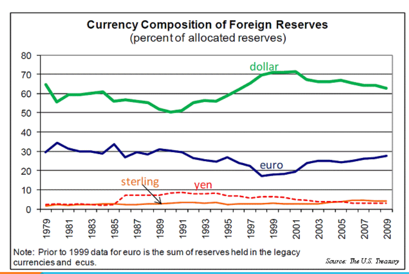
− The reverse viewpoint is what led the French to conclude that exchanging their dollars for gold under the BWS was their best option. *Exorbitant privilege* was coined by the 1960s French Minister of Finance with the full support of his leader, Charles de Gaulle. Theoretically, the idea only applies to *international* reserve currencies, as opposed to regional ones. Exorbitant privilege is based on the idea that central banks that enjoy the privilege of such currency can cheaply create (fiat) money, but their trading partners must provide goods with an actual value equivalent to the nominal amount in order to obtain such currency.

## SELF-PERPETUATING RESERVES




*Once established, it is incredibly hard to displace an international currency reserve, as evidenced by the USD continuing to be used as the currency reserve of choice despite the collapse of the BWS.*
*What do you need to repay this $60 trillion of debt?*

## THE DOMINANT DOLLAR




*Seeing this chart for a 2nd time allows you to see the self-perpetuating mechanism at work. Despite the Nixon Shock, the use of USD in central bank portfolios actually increased!*

## THE TRIFFIN DILEMMA TODAY


## WHAT IS THE WORLD BANK?

The World Bank is the world's most prominent multilateral development bank (MDB), created to provide advising and financing (either via loans, credits, or grants) for worthy projects that meet international development goals.

Goal today: End extreme poverty within one generation and boost shared prosperity.

Founded by J.M. Keynes and US Treasury Secretary Harry Dexter White at Bretton Woods.

Location: Washington, DC (Note: World Bank presidents have ALL been American.)

Until 1968, the loans were largely for infrastructure where repayment was virtually assured because the projects generated economic activity. Afterwards, the focus shifted to the developing world. Still, the loans often have "strings attached" (see Washington Consensus).

Voting power is based on 1. economic size and 2. contributions.

- United States (15.85%)
- Japan (6.84%)
- China (4.42%)
- Germany (4.00%)
- France (3.75%)
- India (2.91%)
- Russia (2.77%)
- Saudi Arabia (2.77%)
- Italy (2.64%)
- Others

## OTHER MDB

World Bank

International Fund for Agricultural Development (IFAD)

European Investment Bank (EIB)

Islamic Development Bank (IsDB)

Asian Development Bank (ADB)

European Bank for Reconstruction and Development (EBRD)

CAF - Development Bank of Latin America (CAF)

Inter-American Development Bank Group (IDB, IADB)

African Development Bank (AfDB)

Asian Infrastructure Investment Bank (AIIB)

New Development Bank (NDB)

*We will learn more about these MDBs in the RMB internationalization module.*

## WHAT IS WRONG WITH THE IMF?

IMF = International Monetary Fund

The IMF is NOT an MDB, but rather a research/monitoring organization & pool of international funds that is focused on fostering international monetary stability. Its loans are typically used to address balance of payments shortfalls in its member countries, thus reducing exchange rate variability.

Voting power is based on a formula that includes weighted average of GDP (50%), openness (30%), economic variability (15%), and international reserves (5%).

US, Japan, Germany, UK, and France have 40% of the voting power while Canada has more influence than China and Belgium more than Brazil.

The current quota formula gives the US de facto veto power because reforms are required to receive an 85% favorable vote.

In 2010, reforms were approved by the IMF but the US Congress did not pass them.

## WHAT ARE SDR?

SDR = XDR = Special Drawing Rights, a currency-like asset based on the relative value of a basket of prominent currencies used as the unit of account for the IMF.

The composition of this "basket" is reviewed and adjusted every 5 years.

There are no notes or coins denominated in SDR, but it is a key interest-bearing (if held in excess of a respective national quota) international reserve asset for its member countries.

As of 12/30/2010, SDR is comprised of:

- USD (41.9%)
- EUR (37.4%)
- GBP (11.3%)
- JPY (9.4%)

At the 2010 rebalance, the total value of the SDR pool was 204.1b (in today's dollars approx. USD280b).

Will the CNY be included in the 12/30/2015 recalibration?

IMF Managing Director Christine Lagarde

No... not exactly... but we really need to talk about your Congress.

**Calculation of Currency Amounts in the New SDR Basket**

(as of December 30, 2010)

| Currency | (1) Initial new weight (share) | (2) Illustrative currency amount[1] | (3) Exchange Rate on[2] 12/30/10 | (4) U.S. dollar equivalent |
|---|---|---|---|---|
| Euro | 37.4 | 0.4230 | 1.32500 | 0.560475 |
| Japanese yen | 9.4 | 12.1000 | 81.63000 | 0.148230 |
| Pound sterling | 11.3 | 0.1110 | 1.54350 | 0.171329 |
| U.S. dollar | 41.9 | 0.6600 | 1.00000 | 0.660000 |
| SDR1 = US$[3] | | | | 1.54003 |

[1] Currency amounts are based on average exchange rates for a period from October 1 to December 30, 2010.

[2] The exchange rate for the Japanese yen is expressed in terms of currency units per U.S. dollar; other rates are expressed as U.S. dollars per currency unit.

[3] The value in U.S. dollars of one SDR, rounded to six significant digits.

Weights are assigned to each currency in the SDR basket to take account of changes in the share of each currency in world exports of goods and services and international reserves. This methodology raises significant questions for the next rebalance on 12/31/2015.

## IMF REFORM PACKAGE

December 2010 – IMF Board of Governors agree to a reform package based on

(1) that the size of the IMF's resources has not kept pace with increased economic activity in the global economy; and

(2) that the representation of emerging and developing economies at the IMF does not reflect their growing importance in the global economy.

(3) Create an all-elected IMF Executive Board

The impact of this reform package would

- double the quota for the IMF currency's core source of funding
- would put Brazil, China, India and Russia among the fund's top 10 shareholders

***"In its budget requests for FY2014, FY2015, and FY2016, the Obama Administration has included authorization and appropriation requests for the United States to endorse and ratify the 2010 reform package."***

Congress has yet to approve. But there is hope that Obama (who has made passage of this reform a priority) can get something done at the G20 meeting in November 2015.

"If we don't write the rules, China will write the rules out in that region."

Obama's 2015 State of the Union address

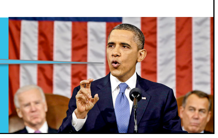
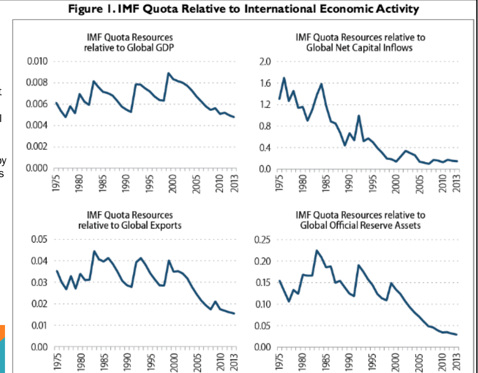


**Figure 1. IMF Quota Relative to International Economic Activity**

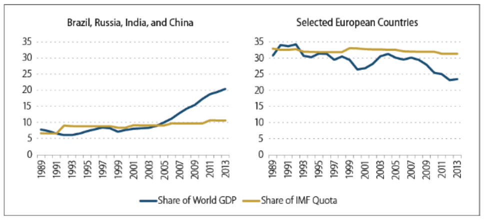
These charts support the argument for increasing the overall IMF resources. One could argue that the doubling mandated by the reform package is not enough.




**Source:** International Monetary Fund (IMF), *International Financial Statistics*; World Bank, *World Development Indicators*.

**Notes:** Net capital inflows include portfolio investment and foreign direct investment (FDI). Reserves include holdings of gold.

**Figure 2. IMF Quota and Share of GDP:
Selected Emerging Markets and European Countries Since 1989**




**Source:** IMF, *International Financial Statistics*; World Bank, *World Development Indicators*.

**Notes:** Countries selected for illustrative purposes only; other countries or groupings may be considered under- or over-represented at the IMF. Selected European countries include Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

*The BRICs make up more than twice the percentage of the world economy today as they did in 2005.*

## PRE- AND POST-REFORM IMF SHARES

| | Country Quota Shares | Post-2008 Reforms | Post-2010 Reforms |
|---|---|---|---|
| | US | 17.661% | 17.398% |
| BRIC | China | 3.994% | 6.39% |
| BRIC | Brazil | 1.782% | 2.315% |
| BRIC | Russia | 2.493% | 2.705% |
| BRIC | India | 2.441% | 2.749% |
| | Germany | 6.107% | 5.583% |
| | United Kingdom | 4.502% | 4.225% |
| | France | 4.502% | 4.225% |
| | Saudi Arabia | 2.929% | 2.095% |
| | Japan | 6.553% | 6.461% |

*85% of the vote is necessary to enact major IMF reforms. Hence, even post-reform the US would maintain a veto.*

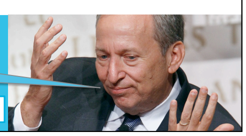
## DID NIXON REALLY KILL BRETTON WOODS?

The basic argument that Congress uses to oppose IMF reform is based on the same austerity that put Europe on the economic decline. The IMF doesn't need any more money; its resources are enough.

Others are skeptical that emerging economies support the existing norms and values of international financial institutions, and question whether they would be "responsible stakeholders." Emerging countries may also have significantly different views on economic policies, such as on free markets and state-led development. There may be concerns among critics of the reform package that *increasing the voice and participation of emerging markets at the IMF could result in the support of economic policies that are less aligned with the preferred policies of advanced economies.*

What exactly is Congress trying to protect by not allowing reform? I thought the Bretton Woods System was dead.

"[The IMF reforms] would produce more international goodwill and respect for us than trade deals… Trade negotiations are often highly adversarial. Supporting financial backstops isn't."



Former Secretary of the Treasury Larry Summers

## WASHINGTON V. BEIJING CONSENSUS

The *Washington Consensus* was promulgated in 1989 to provide a series of guidelines and principles to guide the future development of developing nations in Eastern Europe and Latin America.

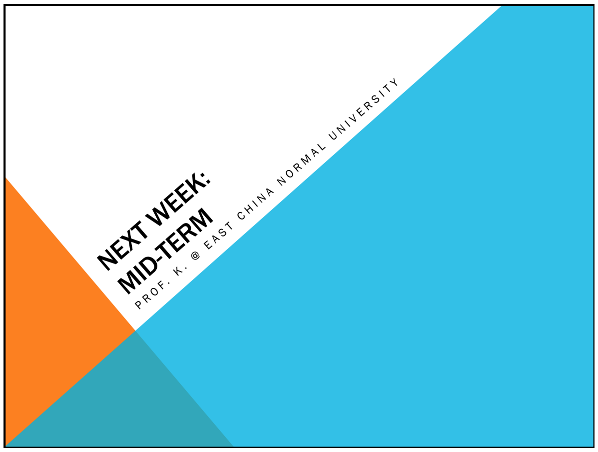
John Willamson provided 10 guidelines for the Washington Consensus:

1. Avoidance of large deficits
2. Efficient public spending
3. Tax reforms
4. Market-oriented interest rates
5. Competitive exchange rates
6. Privatization of state enterprises
7. Deregulation
8. Trade liberalization
9. Promotion of FDI
10. Private property rights

Only the red guidelines are unique to the Washington Consensus (i.e. these steps are unique to an open capitalist society). The *Beijing Consensus* is:

1. more general rather than specific,
2. focused on sustainability rather than GDP, and
3. directly rather than indirectly focused on financial sovereignty.

*Beijing Consensus: "Every nation has the right and ability to find the most suitable way for its development." – Chen Yulu*


NEXT WEEK:
MID-TERM
PROF. K. @ EAST CHINA NORMAL UNIVERSITY