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A Brief Analysis on Bretton Woods

The fundamental concept of having multiple countries work to establish cooperative monetary policy while maintaining the individual country currency and base domestic monetary policy is, at first, an effective concept to severely diminish speculative currency manipulation. Indeed, during the period following the Great Depression into the late 1930's, Economists began to look for a a way to form such a system. Several years later, those ideas would come to fruition and shape much of the next twenty-five years in major worldwide monetary policies. Known as the Bretton Woods system, the collaboration between nations with a representative body would turn out to be a major stepping-stone for cooperative monetary theory. The motivation, design, implementation, amendments and eventual downfall of Bretton Woods all contribute *tremendously* in both scope of understanding and in the resulting events – all of which are crucial to the field of Macroeconomic Theory. Exploring Bretton Woods systematically results in awareness and understanding of policies such as the gold standard or fixed monetary exchange rate, both of which contributed to the dominant school of monetary and fiscal thought from the period in late 1944 through mid-1971.

Bretton Woods – or rather how it is seen today – began as postwar thoughts and eventual discussions between two prominent Economists – John Keynes from Britain and Harry White from the United States. The idea of speculation within currencies caused by flexible exchange rates and non-cooperative policies between nations was a large part of moving past the Great Depression, and both Keynes and White (among others) had their ideas to end such a systematic issue. Before any policy was made, the two men began working to develop a formalized system to combat it. Keynes, a well respected and known voice for the Keynesian School of Economics believed that a central authority should exist to fix imbalances between nations trade deficits in a ideally fixed exchange rate system. Like Keynes, White also believed in a central authority but modeled the mechanism by which the authority would fix issues such as deficit as well as the scope of when to act in a different manner. Both men were influential when the Bretton Woods conference occurred in July 1994 to discuss and sign what is known colloquially as the Bretton Woods agreement. Among the many Allied Nations that signed the agreement, the United States and Britain were the two most influential. Furthermore nearing the end of World War II, the United States was the dominant superpower and controlled the vast majority of the world's gold output. Harry White and John Keynes' disagreements about the mechanisms by which a central authority would regulate disturbances between several countries economies' (indirectly by correcting – or stabilizing – any inefficiencies) would end up being a fundamental part of the agreement. Keynes argued for the creation of an authority he called the ICU or International Clearing House which would have strong power to fix such inefficiencies. It would regulate trade with a one-way currency controlled by the ICU for balance of trade in a fixed interest rate monetary system. The bancor was proposed, which would be fixed and backed by gold, controlled and distributed by the ICU. As a country would export, they would add this fixed bancor and imports would decrease it. The idea was quite simple – a country that imports too many goods will have a surplus (positive in relative to another country) amount of bancor which is backed by gold one-way such that it acts as a unit of measure to keep track of trade balances - and fixed against the national currency. By doing this, a country with an imbalance in trade with another (say a country that imports too many goods) would have a surplus of bancor and, because of fixed exchange trading, having their currency weighted negatively against this unit-only currency. The ICU would then symmetrically balance this so that a country with a surplus of the bancor would be incentivized to purchase the exports of another country as importing goods from another country with surplus bancor reduces this surplus. The idea was to have a zero unit-of-measure (bancor), or an equilibrium/balance of trade. Harry White, an American Economist, believed in a quota-system by which a nation would deposit 75% of their national currency and 25% in gold to a central account controlled by an agency similar to the ICU. All nations would then be able to borrow from this if there were trade deficits. There lies an issue, however, when a nation needs to borrow more than they have deposited. Because this system is proportional – that is the currency is fixed but larger countries with more gold such as the United States will deposit more of it physically (as well as their fiat currency) – but all nations can borrow the same fixed amount of gold that they put in by default. In situations where there is a severe disequilibrium in a trade deficit, for example, the central authority can step in and pull from the reserves of all the countries that have deposited in the central account. This “disequilibrium” was never formalized in the agreement and has consequences as a result. The United States had a lot of control in the conference and a compromise was made, utilizing White's quota-system and opening the *International Monetary*

Fund (IMF) which was (and still exists today) the central authority to control the reserve funds. Shortly after, the Bretton Woods agreement was signed and implemented in monetary/fiscal policy of member nations.

The agreement signed contained a few important markers: trade was to be liquid, that is open and fair priced between nations. Additionally, the IMF would work to come in to fix any imbalances. The member nations would all deposit 75% fixed national currency tied to 25% gold to the central reserve. This would, again, give the IMF reserve a proportional representation. There was a big problem that began right after, however – the United States controlled the vast majority of gold output, giving them a major advantage but also having an issue of the US Dollar in short circulation. This leads to a surplus in the US's balance of payments. However, it also leads to an issue wherein countries are incentivized to change (usually inflate) their currency. This was forbidden by the agreement and you had to have a voting representation to change it. There were, however, small adjustments allowed. The idea of these adjustable rates within a set amount (which was 1% and eventually up to 10% max) allowed a nation to modify their domestic monetary / fiscal policy to allow for slight inflation. The reserves would be a backup source that should keep that balanced. Nations, however, like the United Kingdom utilized their currency GBP with inflation as there was an initial shortage in the US Dollar supply. The rebuilding of much of Eastern Europe post WWII and the Marshall Plan changed the course of this completely and began the de-facto US Dollar standard.

As the United States implemented the Marshall Plan to fix much of Europe, they sent out massive amounts of aid – $13 Billion – into Western Europe. The result was an increase in outflows from the US in US Dollars, reducing the brief shortage of the US Dollar in world money supply and the subsequent beginning of the "peak" period for Bretton Woods. It is worth mentioning the prior gold standard, which is a simple system of international trade in which a nation's wealth is backed by gold alone. In a set of economies under a pure gold standard, there is no inherit deficit. The balance of physical gold determines capability of a nation. With this model, however, and the US Dollar not in short supply in the monetary supply worldwide, there is a different type of event that occurs. For a while, the gold ***exchange*** based system of Bretton Woods worked, with the US Dollar as the de-facto bearer. Realistically, this was a gold-exchange-USD system and worked because of the large amount of gold that the US held. Herein lies the confidence problem, where we see the trade-off between the likelihood of being able to cash out gold if the supply is not there. As the model worked initially, demand for a finite, physical object (gold) increased and there was so much confidence in the US

Dollar that it became like gold: people began using it within their countries' monetary policy and systems. The US entered a quick deficit that would remain throughout Bretton Woods. This leads to a fundamental problem: when a model like Bretton Woods allows for domestic monetary and fiscal policy within nations, some of which rely on the de-facto currency in a foreign nation, and that currency is also being used as the standard/main currency for means of production, trade, and payment within the host country (in this case, the US Dollar – United States) – a conflict forms. Simply put, it is **not** wise to have a monetary standard worldwide fiat and that same currency in circulation of a major domestic economy with a policy that allows for modification. At the same time, the United States has large influence within the IMF and subsequently any country – at this point most – that rely on the USD as a confident, sound currency.

As the years passed, the United States experienced a deficit which concerned domestic policymakers. The gold is limited and relatively fixed so printing more money is direct inflation and also against the standard rule (in excess) of the IMF, however the IMF's vague stance on "disequilibrium" (which was the only way they would interfere in any policy) only fueled this issue. Even the speculation caused deflation in many currencies like the GBP, but the IMF did not intervene as the rules for doing so were very vaguely defined. Because of this, many individuals could profit as the eventual degradation of the GBP was obvious and to switch to the US Dollar would not cause any issues by default. This, however, only strengthened the problem. In the United States, the spread between the deficit and Federal Reserve output grew larger and larger. That is the deficit continued to increase while the demand for the currency is there, and with fixed exchange trading the Federal Reserve began printing more and more US currency. In the 1960's, things began to really show as the output of gold worldwide (excluding the United States) was more than the supply of US Dollars. This, of course, is classic inflation, and led to the confidence in the US Dollar to go down. At the same time, the IMF issued a new unit currency (somewhat similar to Keynes described earlier), but at this point it was too late – the replacement of the US Dollar with the newly-issued SDR (from the IMF) only increased the inflation caused by domestic monetary & fiscal policy choices in the United States. The US, again, would not reduce the price of their currency at home by deflating it with respect to the gold to even the backing and the conflict of interest between having a de-facto US Dollar standard and that currency used in large domestic policy. There were several events in the 1960's that also contributed – the Gold Rush was severely capped as the real price of gold had been going down (since it is a finite thing, the confidence that it holds value goes down even with more output) and this led to decisive action by US policymakers – who quickly demonetized gold and began deterring others from exchanging US currency to gold. This resulted in reduced liquidity worldwide, but the US did recover with their domestic policy. At this point in the late 1960's, the US began rejecting open trades and very soon after worked with the IMF (and the reserves they held) to exchange the large amounts of USD to gold. Finally, in 1971, President Nixon ended the gold standard completely and officially, which marked the end of Bretton Woods.

The idea of a fixed rate system of interchange is good in theory – allowing multiple nations to trade without speculation, currency manipulation, etc. is the ideal condition. Achieving it, as seen with the Bretton Woods system, is not as easy. When there is a de-facto currency that becomes the standard that is actually based on the exchange (not pure gold-standard, but gold-exchange-USD) of a currency that is both used for domestic policy and for the well being of that nation, then you have a serious conflict as there was here. The cost of fixed rates is of course participation and the “fees” that come with that, for example the reserve that was part of Bretton Woods, or the cost of trading with nations only participating in the system as well. As this brief look into Bretton Woods shows, achieving the cooperation with fluid currency today that is backed by much more complex forms of assets would be very difficult to do in a large scale of participants – much harder than it was post-WWII with a gold-based standard.

Attached are several diagrams which are labeled and help visualize many important topics discussed here. The textbook is referenced along with a few sources used are cited on the next page. The textbook is a history of Bretton Woods. It is the primary resource and I read it prior to writing this paper.

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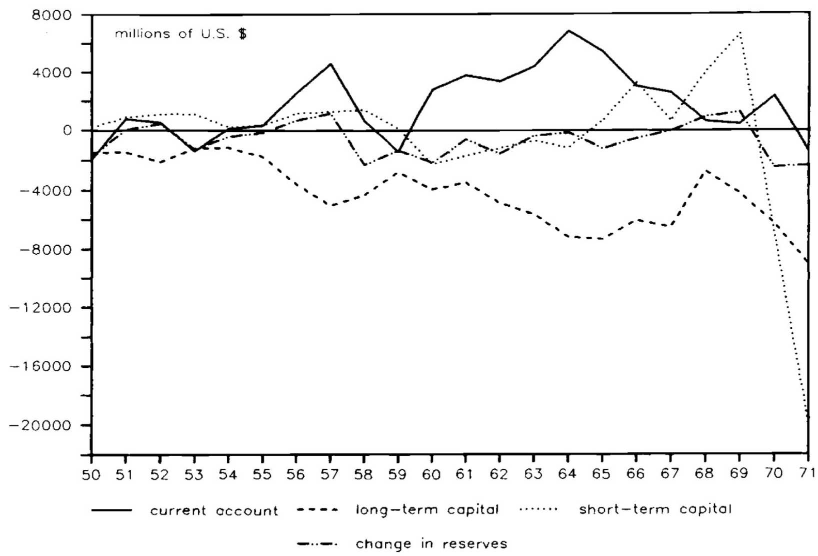

Fig. 1.18 Balance of payments, United States, 1950–71

(*A Retrospective on the Bretton Woods System: Lessons for International Monetary Reform,* 56)

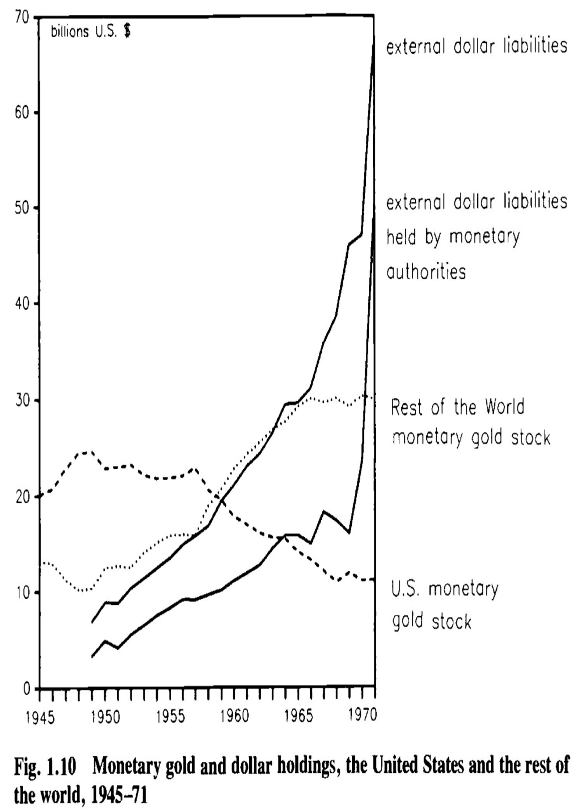

Fig. 1.10 Monetary gold and dollar holdings, the United States and the rest of the world, 1945–71

(*A Retrospective on the Bretton Woods System: Lessons for International Monetary Reform,* 39)

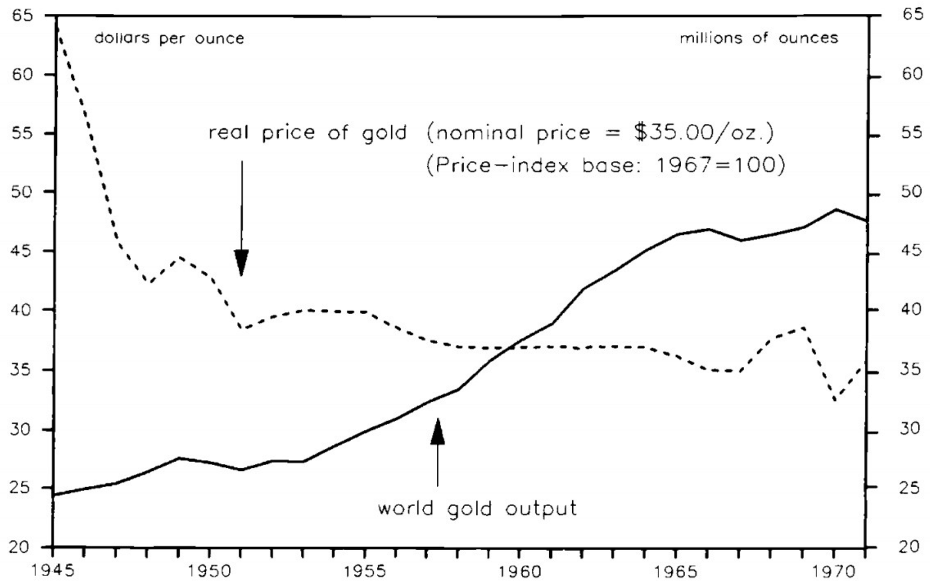

Fig. 1.21 The real price of gold and world output, 1945–71

(*A Retrospective on the Bretton Woods System: Lessons for International Monetary Reform,* 62)

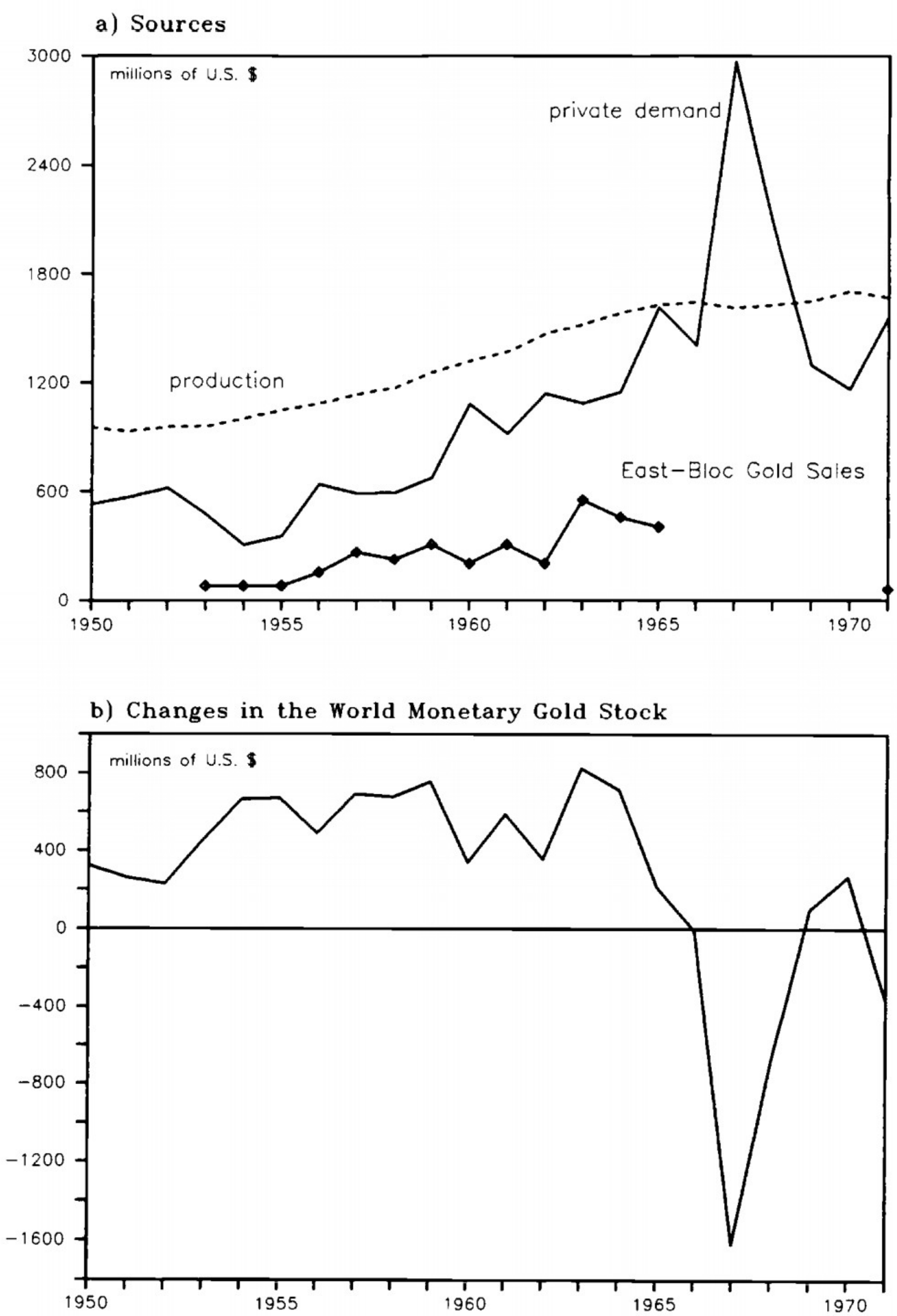

Fig. 1.22 The sources of change in the world monetary gold stock

(*A Retrospective on the Bretton Woods System: Lessons for International Monetary Reform,* 63)