INTERNATIONAL FINANCIAL SYSTEM AND CAPITAL MARKETS: A BRIEF OVERVIEW

Branko Mladenovski1*

¹European Center for Peace and Development (ECPD), Belgrade, Serbia, e-mail: bmladenovski@gmail.com



Abstract: The purpose of this paper is to summarize the most important points that describe the international financial system as the framework that governs financial flows from movements of capital, goods and services. The international financial system encompasses financial markets and everything and everybody ranging from central banks to individual investors, with every possible variation of financial intermediary in the middle. Through analysis of source literature and contemporary body of research, the paper provides historical context of the evolution of the financial system, going from fixed to floating rates, and ultimately ending with managed floats. Moreover, it provides a synopsis how the system is working out exchange rates, and how it facilitates trade, investment, and financing, both short-term in the money markets or long-term in the capital markets. In this last iteration of the system, despite plentiful examples of financial crisis that have happened over the decades, most notably the Great Recession of 2008 and the Covid-19 pandemic induced crises, all financial markets have seen growth in volumes of trades and profits over the long-run. However, humanity is now faced with exceptionally tense geopolitical realignments and shifts in economic might among the economies that follow the USA. Before the US-China trade war, China was galloping toward reaching the top spot while Russia was banking heavily on Europe's thirst for fossil fuels. What form will the international financial system ultimately take is uncertain, but worth pondering nonetheless. As long as the system remains rules-based in its essence, reforms are welcome.

Keywords: financial system, exchange rates, capital markets, debt.

Field: Social Sciences, and Humanities.

1. INTRODUCTION

The International Financial System today is a mosaic of different rules, conventions and institutions that govern financial flows and interactions between various nations, individuals and corporations, who are participating in the global economy. It is the framework that determines the exchange rates which direct the route taken by capital, goods and services, in search for new markets, higher returns or safer investment environments. The system is made of central and commercial banks, various financial institutions and intermediaries, currency markets, stock and bond markets, etc. Throughout history, there have been ups and downs in the degree of financial integration between countries and regions, going from high financial integration (globalization) to low, and then back to high again. The benefits of increased financial integration like efficient (re)allocation of capital or risk sharing are many, but so are the dangers of financial contagion and other negative spillovers from an increasingly intertwined world economy (Allen and Gale, 2000; Burks et al., 2021).

Even though (international) trade and commerce have been taking place since tribal times and much can be said about their evolution in complexity over time, for the sake of brevity and relevance, this chapter will examine the latest four major periods of the development of the international financial system. Starting with the **Classic Gold Standard** period (1870s-WWI), which was characterized by a guarantee of governments that currency will be convertible into gold at a fixed price (fixed exchange rate). During this period, one in every two pounds sterling of British capital invested abroad was directed towards developing (low-income) countries (Schularick, 2006), banking crises seldom coincided with currency crises (Bordo et al., 2001), and financial globalization was increasing due to low legislative barriers on movements of capital. With the onset of WWI countries suspended buying and selling gold at the previously agreed value in order to cope with the economic pressures that would arise from the war effort, thus bringing this incarnation of the financial system to an end. The **Interwar Period** (1914-1945), was a time of confusion and great skepticism toward foreign trade, with high import tariffs and other protectionist measures, during which "many countries suffered from hyperinflation" (Levi, 2005, p515). Some countries tried to readopt the gold standard to fight inflation but were not successful in reintroducing the system globally because

*Corresponding author: bmladenovski@gmail.com

© <u>0</u>

© 2023 by the authors. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

other countries used competitive devaluations and capital controls to boost their economies. In this era nations learned that they can return to growth and stabilize their economies in the long-run only if they act collectively in establishing a rules-based system that will govern international finance.

Therefore, near the end of WWII, the great powers embarked on remaking the international order including the international financial system. The adoption of the **Bretton Woods'** Articles of Agreement in 1944 ushered in a period that stabilized global trade and capital flows by pegging the US dollar to gold, and other major currencies to the US dollar. This was a period of fixed exchange rates and intense capital controls, as well as, the birth of the International Monetary Fund (IMF), a multilateral organization which was envisioned to collect and allocate reserves on a global level in order to promote international monetary cooperation, enable growth of foreign trade, promote exchange rate stability, create a system of international payments, and keep a hefty reserve base that can be loaned out to countries who are in need to stabilize their economies in times of Balance of Payments (BoP) deficits that cannot be tamed with domestic reserves alone. The original mission of the IMF was narrower than today's, and macroeconomic in nature, with a goal to provide long-term financial system stability. However, the IMF has evolved greatly since its inception and has now added responsibilities like conducting financial research, providing policy advice to governments and central banks along with technical assistance and training, and loans funds to fight poverty and even climate change. The IMF created its own reserve asset called Special Drawing Rights (SDR), which is an interest earning asset with a value derived from a basket of five major currencies, whose interest rate impacts the rate at which the IMF loans funds to its members.

The Bretton Woods (fixed rate) system came to an end because the rest of the world had accumulated more gold reserves than the United States whose currency, the USD, was the sole one with a value fixed to gold. The increasing surpluses in developing nations' balance sheets contributed to the expansion of their gold reserves and appreciation of their currencies. Moreover, the French were the main skeptics on the future value of the US dollar and started exchanging their US dollar reserves for gold throughout the 1960s. This, along with other factors, led to a massive increase in the price of gold and tipped the pressure to devalue the US dollar, unpegging it from gold forever more, starting in 1971. Apart from a few dictatorial regimes that might still exist, this can be considered as the end of a period of intense government involvement in controlling exchange rates.

The final stage in the development of the international financial system is the one we are all witnesses to. Exchange rates are mostly allowed to fluctuate based on core market principles like supply and demand. Balance of payment deficits and surpluses are balanced (financed or reallocated) in accord with the latest best-practices and complex analytical research. In theory, the market forces alone are supposed to control and set exchange rates between currencies, but in practice this is not always the case. Central Banks in many countries engage in what is being called a **managed** or "**dirty float**," a practice utilized by governments to keep their currencies within projected levels, usually within a few percent on both sides of the nominal value, by purchasing and selling reserve currency on the market, therefore impacting the supply and demand of the domestic currency in order to stabilize the exchange rate. This system of **cooperative intervention** reflected the need for greater coordination between nations in managing the float of their currencies partly because of the ever-increasing US deficits that were financed by bond sales in creditor nations like Germany and Japan causing ever increasing demand for USD while pushing down the values of local currencies, but also because of the very prominent role private capital flows started playing on the world scene.

Ultimately, it is important to differentiate between the International Financial System (IFS) and the International Monetary System (IMS). The introductory text above concentrated on the IFS mainly because it "lies at the heart of the global credit creation and allocation process" and IMS falls within its purview, (Fosler, 2011, p1). IMS is mostly related to international payments and reserves, overseeing liquidity issues in servicing current account obligations, usually when there is "too little" of a particular currency which is "concentrated in wrong places." This geographic "mismatch in supply of liquidity" requires policy responses that are usually limited to central bank actions, whereas IFS problems and crises are much wider in scope and are often precursors of major system wide interventions and reforms. In the eyes of the IMS, money is just a unit of account and is not interest bearing. Money is used to facilitate exchange of goods and services and "calibrate values of exchange of financial assets," which are themselves interest bearing.

2. DETERMINATION OF EXCHANGE RATES

On a most general level, exchange rates are determined by the balance between supply and demand of any particular currency on the foreign exchange markets. However, this fact does not say much about what influences the supply and demand in the first place. Therefore, theories have arisen to explain the movements of the supply and demand curves of currencies. One such theory is **Purchasing** Power Parity (PPP), and its integral part known as The Law of One Price, which states that if a frictionless global market exists, the price of identical assets or goods would be equal everywhere, if converted to a common currency at spot rate. Absent transportation, transaction costs and legislative barriers, whatever price differences might exist in different locations will be leveled off by arbitrage until an equilibrium is reached. In reality however, differentials in prices do exist and they can be accounted for by transportation costs, local taxes, import tariffs, and other frictions. The Law of One Price is what connects "exchange rates and commodity prices," while the PPP represents a long-run connection "between inflation and exchange rates," (Levi, 2005, p143). **Absolute PPP** states that a spot exchange rate can be determined as a ratio of cost of an identical bundle of goods in two currencies. In other words, if a price of a basket of goods in the UK costs 4 GBP, and an identical basket of goods costs 6 USD in the USA, the exchange rate would be calculated as 4GBP/6USD, or 1GBP=1.5USD. This kind of calculation rests on the relationship between product prices and exchange rates. However, in money market context, PPP implies that investment yields and borrowing costs, no matter the denominating currency, would be the same everywhere if balanced by exchange rates. According to Relative PPP, which is PPP followed over time with inflation rates taken into account (accounting for price levels), the principle shows that the currency of the country with lower inflation will appreciate vis-a-vis the one from the country with higher inflation. And it is important to underline that an appreciating domestic currency allows for a higher standard of living and increased consumption from imports, while adversely affecting the volume of exports.

Other movements of exchange rates can be understood through analysis of The Balance of Payments (BoP), which is an account of all inflows and outflows of payments of a particular country. It serves as a record of the supply and demand for that currency and is composed of three major segments, current account, capital account and financial account. The current account, which lists purchases and sales of goods and services, along with net investment income and unilateral transfers, can either have a positive or a negative balance, or surplus and deficit. Surpluses mean increase in central bank reserves and push the currency up, while deficits (especially persistent ones) push the currency value down and increase foreign debt which is used to finance the deficit. At times when current account deficits are out of control, a country might attempt to lower the value of its currency to encourage exports, but "this strategy is not always successful" (Madura, 2010, p50). Notable factor that influences the size of exports are prices of domestic producers compared to prices of their foreign competitors, and those with higher production efficiency (productivity) tend to have their local currency appreciate. Appreciation of domestic currency occurs also if foreign real incomes rise faster than domestic real incomes, which means that foreigners can afford to import more, resulting in demand for local currency in the exporter country. The capital account reflects a country's long-term and short-term capital investments. It is a ledger of investment inflows and outflows, with particular interest in accounting for Foreign Direct Investment (FDI, usually at or above 10% stake) and other Portfolio Investments. A negative balance in this account is not necessarily a bad thing, because if invested wisely, a capital outflow today is a prerequisite for receivables in the future. This is just one example of the interplay between different accounts in BoP, and how one might influence another. The inverse relationship between the current and capital account implies that they have to balance each other out. If imports are greater than exports and a current account deficit occurs, to finance that deficit a country might export financial assets by selling bonds to foreigners which is noted as a capital account inflow. While the current account reflects inflows and outflows due to trade in goods and services, investment income and unilateral transfers, the capital account depicts the net investment position of a country by tallying up its capital flows (financial assets and liabilities). It is important to note that despite its face value appeal, running constant surpluses in the current account is not the best option to pursue because it means that a country is not consuming as much from imports as they can, and is similar to saving constantly by buying very little and living below one's means. Therefore, it is best for a country to aim to alternate between short-term surpluses and deficits. It is curious that only the USA seems to be exempt from this rule. Triffin (1990, p85), supplies a dated yet relevant reference on this issue and locates the enormity and persistence of US external deficits in the "disproportion of military expenses" between the US and the rest of the world. He also warns that should US deficits be eliminated, there would be a "world-wide depression" unless other large economies unleash such an expansionist policy which is able to rival the one previously taken by the US.

3. INTERNATIONAL MONEY AND CAPITAL MARKETS

Financial markets are there to facilitate efficient allocation of risk and resources according to previously agreed rules and principles. Since governments often need to finance budget deficits and companies often need funds to support operations, both of them are no strangers to borrowing in the short-term. This market where investors and borrowers meet to arrange short-term financing (less than one year) is called the **money market**. It became popular in the second half of the 20th century when US companies started depositing US dollars in European banks, who then lent out those dollars to corporations and entities who engaged in international trade and needed dollars to settle payments. This kind of deposits of USD in European and banks on other continents are known as Eurodollars, and the market Eurocurrency market. Along the same line, petrodollars are dollars received from oil trade and deposited outside the USA. These deposits are often recycled through commercial banks and given out as loans, in many cases back to those countries who imported oil in the first place and had previously supplied the funds that they end up borrowing. The source of the Latin America Debt Crisis of the 1980s can directly be linked to excessive petrodollar recycling. Still, the international money market provides an option for investors to put their surpluses in currencies from countries that have low political risk, higher relative return rates, and local currencies that are expected to appreciate. Though returns in money market investments are lower than investments in long-term debt, due to the short-term nature of financing provided, the money market exhibits high liquidity and efficiency.

Capital markets are places where long-term capital is supplied by investors and debt is taken on by borrowers. Even though the end result is to raise funds, to do that, bond markets issue debt securities while stock markets issue equity securities. Investors in the bond market become lenders, they receive regular periodic interest payments (coupon payments), and expect a full repayment of the principal at some specified date of maturity, while investors in the stock market, who supply equity to publicly listed companies, become one of many co-owners of that particular company. They sometimes receive dividends, but there are no guarantees that the stock will rise in value so the investors could make money in the future by reselling it. Therefore, the stock market is considered riskier than the bond market. This is reflected in the expected rates of return, with the bond market offering much lower, but almost riskless, yields over periods of 10, 20, or even 30 years for some mortgage-backed securities and US treasury bonds. Another notable difference between the stock and bond markets is that governments can raise capital by issuing bonds but they cannot issue stocks.

The **primary market** is the place where debt is initially issued and bonds are sold directly from borrowers to lenders. Those lenders can either hold their bonds to maturity while enjoying regular coupon payments at specified intervals, or they can sell the bonds on the **secondary market** where all debt securities are priced according to market rules and circumstances. For example, since bond coupon rates are fixed for long periods of time, if a change in the official interest rate occurs, the price of those bonds that already have a locked interest rate will sell at premium on the secondary market if the central bank rate falls, or sell at a discount if the official rate increases, like now, when the central banks are fighting inflation. If the central bank rate goes higher than it was before, new bond issues will have higher coupon rates than those issued previously. Market forces then work out the discount needed for the lower yielding bonds to be sold in a higher yielding market.

International bond markets provide cheaper financing to borrowers and innumerable opportunities for investors to diversify portfolios. Borrowers do not need to rely on domestic savings alone when they can raise funds from institutions and private investors with surpluses from different countries. In general, bonds are much easier to price than stocks, because their price depends on ratings from major credit rating agencies. How objective those large credit rating agencies are is a paper on its own, but their ratings impose real constraints on how high or low bond yields can be. Stock prices, on the other hand, are much more slippery to pinpoint and require individual company analysis to be performed by a qualified and experienced person or institution. Otherwise, if devoid of due diligence, investing in stocks amounts to little more than placing bets in a casino.

The rise of the international capital markets has been largely influenced by the deregulation that happened during the Reagan administration in the USA and Prime Minister Thatcher's government in the UK back in the 1980s. Lax capital controls along with the ever-increasing strife for profits led to larger integration of the world financial system. Levi (2005, p10) states that from the 1970-2000s, US investment abroad rose by ten times, while foreign investment in the USA rose "almost twenty times." This globalization of capital flows brought all the benefits associated with improved liquidity, risk diversification and accessibility, but it also exposed a much larger sample of the world's individual economies to the risks associated with said liquidity, risk diversification and accessibility. Financial integration allowed for both

positive and negative spillovers to become more mobile. The need to manage risk provided a framework for large and sudden capital outflows which might threaten the economic stability of a nation. Accessibility, on the other hand, provided an option to take on more debt that can be serviced during a downturn, and so on. What deregulation and integration did to the world capital markets practically amounts to removing the controls on the movement of crisis.

Obstfeld and Taylor (2004) find "great unevenness in outcomes regarding both risks and rewards of capital market integration." Even though numbers show that much of the rise in volumes of capital flows is due to investment from one rich country into another rich country, "most financial crises afflict developing countries, with costs for everyone." Despite the risks, capital markets are very efficient in allocation of capital from those with surpluses to those in need. It must be noted that vast regulatory differences exist in different countries ranging from complex reporting requirements to capital controls. Some countries are more shareholder centric, while others are centered on stakeholders. Common law countries, such as USA and UK, provide high protections for creditors and shareholders, while civil law countries, like France, offer less protection. In the USA for example, according to US Securities and Exchange Commission, in case of bankruptcy, bond holders have "priority over shareholders in claims on the company's assets." In France however, creditor rights are lowest, and that impacts the development of capital markets there adversely. de Haan et al., (2020, p14) state that for a financial system to function properly, regulation is needed to "protect property rights and enforce contracts," to "ensure soundness" of the system by mediating information asymmetries and "promote competition" (p38). They go on to claim that even though financial systems can be differentiated as bank-based financial systems, present in countries where banks are predominant source of funding, and market-based financial systems where funding is generally raised in the markets, they prefer the "law of finance" view, according to which, it is more beneficial to judge countries by the efficiency of their legal systems in supporting financial transactions rather than by how funds are predominantly raised. This is especially true now since banks have moved on from their traditional roles of taking deposit and giving out loans, toward "fee generating activities" like "securitization of loans" and "risk management products," (p30). Conversely, authors like Fecht, Huang and Martin (2005) propose a model that predicts that bank-based economies should grow slower than market-oriented ones. This could be a result of the dominance of unsophisticated investors that are present more in bank-based economies in which investors use banks to invest in their name. thus immunizing themselves against information asymmetries. According to Fecht et al., (2005, p29), "in countries with flexible legal systems," growth is more notable if they have "market-based financial systems compared to bank-based systems." Equally, the authors find that bank-based systems "provide households with more efficient risk sharing" (Fecht et al., 2005, p30). It is also important to mention that market frictions such as regulation, logistics costs, taxes, and so on play a major role in market efficiency and fund allocation. To that end, Pellegrino et al, (2020), find that frictions are to blame for "persistent" misallocation of capital across countries."

4. DISCUSSION

Capital mobility is the trademark of this last variant of financial globalization and is responsible for many positive and negative spillovers as well. With increased availability of funding, increased indebtedness becomes a problem, and with relaxed capital controls, capital flight becomes an issue worth pondering as well. Alves and Toporowski (2019, p6) find that when deregulation started, "external debt accumulation was mainly through the public sector," while since the 1990s, and especially after 2000, "the private sector gradually began to borrow...at a rapid pace." This impacts policy considerations in the way BoP deficits are approached, ranging from those who reflect Lawson's doctrine in that current account deficits that originate in the private sector are "not cause for policy intervention," (p3) to those who see clearly that current account deficits are correlated with crisis and must be addressed.

Obstfeld, Shambaugh, and Taylor (2004) seek to enrich policy deliberations by charting the course of history of what has become known as the 'macroeconomic trilemma,' by examining "the constraints financial globalization places on macroeconomic policies." The trilemma refers to the impossibility of implementing more than two of the three possible objectives a country could have in controlling its economy, like being able to stabilize exchange rates, enjoy capital mobility, and have sovereign monetary policy. The United States has opted to leave their exchange rate to float freely while implementing their own monetary policy (which affects the whole world economy in one way or another) and having high capital mobility, which is associated with growth and investment. On the other hand, smaller economies which often peg their currencies to the US dollar, or the Euro, are practically importing the monetary policy of the issuer of

the currency they are pegged to, thus effectively foregoing the ability to set their own. Since interest rates in both places have to mirror each other, the smaller economy must adjust to the larger one. The tradeoff smaller economies get from the peg is exchange rate stability. Obstfeld, Shambaugh, and Taylor (2004) find that during the classical gold standard period characterized by "pegs without capital controls" (p6) there was "rapid transmission of interest rate shocks" (p4). These shocks were later mediated by capital controls during the Bretton Woods period, but have since become prominent again for fixed rate regimes in this latest iteration of the financial system.

In this new economic environment, in order to attract investment, some countries have engaged in what can be described as tax competition, which has huge implications on welfare of the citizenry of those countries. However, there exists a "paradox" in international finance which is difficult to rationalize, and that is the existence of tax heavens, which are often under the umbrella of a high tax nations (Britain for example). Tax heavens are the dark corners of the international financial system that need to be the focal point of future tax policy considerations on a global level. Only certain type of economists find value in their existence, while the vast majority of people cannot even understand how the financial system can have such a bug in its programming that allows for hiding of assets and ill-gotten gains in order to obscure ownership or avoid taxation. And it is in taxation that a silent crisis has been brewing for some time, the crisis of welfare decline. Outflow of capital is one of the main culprits for this since capital tends to move from places with higher taxes towards places with lower taxes. Welfare, or government assistance to those in need, is heavily dependent on taxation, and taxes, in general, are levies on labor and capital. If they are lowered for capital in order to attract investment, to avoid welfare decline, they must be increased on labor. But, that would in turn make labor uncompetitive compared to other countries and a risk would arise (as globalization has shown already) that production would flee areas with high labor costs (wages plus taxes) for places with lower costs. Outsourcing of jobs lowers the overall productivity of the nation; however, not all jobs are under the same threat, which mostly affects lower-skilled labor, or the exact segment of society that relies most on the declining welfare. Outlawing tax heavens would therefore go a long way towards plugging the welfare holes present in most countries today, especially the poorer nations where corruption is the main detriment to progress, development and the standard of living. But this is a very lofty goal to achieve. Conversely, what can be done is avoid the trap of tax competition between nations for it only leads to the bottom of welfare. It falls in the domain of domestic governance. dependent merely on domestic politicians, granted they are able to see farther than the next election cycle. Perhaps they would be more inclined to act if they accept the validity of Comelli's (2021) claims that the "more generous a country is towards its youth, by providing them an opportunity to plan ahead, they will go to be less risk-averse toward taking on [household] debt," therefore save for the future by investing in long-term assets such as homes and family run businesses.

5. CONCLUSIONS

The international financial system encompasses financial markets and everything and everybody ranging from central banks to individual investors, with every possible variation of a financial intermediary in the middle. Therefore, the IFS can be considered as the 'blood stream' of international trade and investment. It allows for risk sharing and diversification to reduce financing costs, while the over-the-counter nature of many of its markets allows for the public to complement institutional investment and therefore improve the liquidity of the system as a whole. And most importantly perhaps, the international financial system, and the international currency exchange market in particular, is responsible for determining exchange rates between currencies which makes global trade and capital flows possible in the first place. Supply and demand rule the domains of exchange rates and yields on debt securities. They influence monetary policy and spot rates in the interbank market. Furthermore, the balance of payments, is a ledger of payments between domestic entities (or persons) and foreign ones, over a period of time. When tallied up, these entries show deficits or surpluses in certain aspects (accounts). The current account balances imports, exports, investment income and unilateral transfers, and depicts the country's trade balance. The capital account, on the other hand, records movement of capital and points out the country's international investment position. Finally, the financial account shows the state of borrowing.

In historical context, the macroeconomic pendulum seems to be swinging between high and low capital controls, globalization and de-globalization, expansionism and protectionism. When rates were fixed during the classical gold standard, capital flowed freely and large economies invested in developing ones. However, in the last half century these flows have reverted from rich-to-poorer nations to rich-to-rich nations. In the same period (since the 1970s), the world's largest economy the USA went from being a

net creditor nation to net debtor nation due to their persistent trade deficits which are funded by the rest of the world. This is mostly because the USA has very low savings rates, and partly because it is cheaper for them that way.

Whatever the future might hold, one thing is probably for certain. There are large shifts in economic might among the economies that follow the USA. Before the US-China trade war was initiated by the Trump Administration, and later embraced by the Biden Administration, China was galloping toward reaching the top spot. Their stride might have been hampered by various restrictions imposed by the West on sales of high-tech products, but nations are more durable than any administration and quite stubborn in their intentions, and therefore nobody really knows where the international financial system will go and how it will precisely evolve.

REFERENCES

- Allen, F and Gale, D. (2000). Financial Contagion, Journal of Political Economy, University of Chicago Press, volume 108(1), pages 1-33, February 2000.
- Alves, C., and Toporowski, J. (2019). Growth of international finance and emerging economies: Elements for alternative approach. Cambridge Working Papers in Economics:1930. March 24, 2019.
- Bordo, M., Eichengreen, B., Klingebiel D, and Peria, M. (2001). Financial crises: Lessons from the last 120 years. Economic Policy. 16: 51-82
- Burks, N., Fadahunsi, A., & Hibbert, A. M. (2021). Financial contagion: A tale of three bubbles. Journal of Risk and Financial Management, 14(5), 229.
- Comelli, M. (2021). The impact of welfare on household debt. Sociological Spectrum, 41(2), 154-176.
- De Haan, J., Schoenmaker, D., and Wierts, P. (2020). Financial markets and institutions: A European perspective. Cambridge University Press.
- Fecht, F., Huang, K. X. D. and Martin, A. (2005) Financial Intermediaries, Markets, and Growth. Discussion Paper, Series 1: Studies of the Economic Research Centre No 03/2005. Deutsche Bundesbank. 2005.
- Fosler, G, (2011). International Monetary System vs. International Financial System and the Significance for Policy Makers. Chatham House. December 2011.
- Levi, M.D. (2005). International Finance. (4th ed.). Routledge, 2005.
- Madura, J. (2010). International Financial Management, Abridged Edition, 10th Ed. Cengage Learning.
- Obstfeld, M., and Taylor, A. M. (2004). Global capital markets: Integration, crisis, and growth. Cambridge University Press.
- Obstfeld, M., Shambaugh, J., & Taylor, A. (2004). The trilemma in history: Tradeoffs among exchange rates, monetary policies, and capital mobility. National Bureau of Economic Research.
- Pellegrino, B., Spolaore, É., & Wacziarg, R. T. (2020). Barriers to global capital allocation. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3752485
- Schularick, M. (2006). A tale of two 'globalizations': Capital flows from rich to poor in two eras of global finance. International Journal of Finance and Economics, 11(4), 339–354. https://doi.org/10.1002/ijfe.302
- Triffin, R. (1990). Reform of the International Monetary System. Future of International Monetary, Financial and Trade Cooperation for Development. Proceedings of the Third World Scientific Banking Meeting, Dubrovnik, June 7-10, 1989: 83-87. Eds: Avramovic D, Ostojic N. ECPD and WSBM