1. Difficulties of stabilization policies

The aim of stabilization policies is to ameliorate fluctuations in economic activity (stabilize the business cycle) through, mainly, the management of aggregate demand and, less typically, aggregate supply. These policies find several difficulties.

- **Timing.** Contractionary policies extended over the peak of the cycle may contribute to worsen the recession that follows after the peak. Expansionary policies adopted too late during the recession may contribute to overheat the economy (excessive inflation, unsustainable consumption patterns).

- **Information.** Expansionary policies may not be necessary when the downturn is temporary. Yet it is difficult to distinguish a temporary downturn from a severe contraction.

- **Internationalization.** Stabilization policies tend to be less effective in a more internationalized economy, as that makes domestic economic activity more dependent on the activity of the rest of the world. In a more globalized economy a larger proportion of aggregate demand comes from abroad and that limits the capacity of managing aggregate demand.

- **Short-termism.** Policy makers tend to act in response to immediate, pressing problems, not long run ones. Policies that are successful in the short run may worsen underlying problems in the long run. For instance, in an internationalized economy, domestic industries or sectors with productivity or structural problems may become less competitive. Subsidies and devaluations may help these industries or sectors to remain internationally competitive. But this is a temporal solution that does not address the underlying problems. Most likely, these problems will become aggravated, which in turn will make more pressing the need to maintain the alleviating measures and will make more costly to address the underlying sources of the problem. Apparently successful immediate responses to pressing problems facilitate postponing the need to address underlying causes and contributes to make invisible these causes and the fundamental problems they create: short-term policy success breeds long-run policy failure.

- **Inertia.** Policies that are continuously adopted find it more difficult to be changed because they create groups that benefit from their implementation and that therefore will resist the replacement of traditional policies by new ones. This makes very likely that measures that were effective to deal with the problems existing when the measure were adopted will turn ineffective to handle current problems or old problems in new situations.

2. Financial instability hypothesis (Hyman Minsky)

It is a theory of the business cycle based on the premise that the stability of a capitalist financial system is ultimately destabilizing. A booming economy validates the bets made by borrowers, as a growing economy allows them to repay debt. The more the boom continues, the more evident becomes that borrowers prosper. It then appears not so necessary to follow too prudential rules when incurring debt. Therefore more debt accumulates and the boom goes on.
• **Hedge finance** (cash flows are enough to meet payment commitments on debt) tends to be displaced by **speculative finance** (cash flows are insufficient but future cash flows are expected to be enough to cover all debt payments). In a booming economy finance is increasingly available and that validates speculative finance. The sustainability of hedge finance depends on the expansion of real activity (markets for inputs and markets for goods). The sustainability of speculative finance depends on the expansion of financial activity (a normal functioning of the financial markets is necessary to refinance debt). Speculative finance becomes with time increasingly vulnerable: to interest rate rises, to the loss of value of financial assets held, to the willingness of creditors to refinance debt... Lender may quickly and radically redefine what debt structures are considered sustainable and force borrowers to lower debt ratios.

• **Ponzi finance** occurs when debt can only repaid with more debt. The transition to Ponzi finance by a sufficiently large number of borrowers generates a financial structure which is increasingly susceptible to a crisis, arising when Ponzi borrowers cannot roll over their debt and generalized when most borrowers regard their debt levels excessive and start reducing investment and consumption to lower debt ratios.

• **Minsky moment.** This refers to the moment when the perception that indebtedness is excessive has become widespread. It is followed, to increase liquidity, by massive sales of financial assets, which in turn precipitate a market crash.

• The **financial instability hypothesis** can be summarized as follows: “over periods of prolonged prosperity, the economy transits from financial relations that make for a stable financial system to financial relations that make for an unstable system.” (Minsky 1992)


### 3. Two views on crises and severe economic fluctuations

• **Orthodox view.** Financial crises and severe fluctuations of production and employment are considered anomalies, exceptional events. As such, the orthodox theory need not care to provide explanations for them: financial tranquility is the norm. Markets provide tranquility and efficient outcomes; government intervention brings instability and waste.

• **Heterodox view** (originated in J. M. Keynes). The combination of uncertainty regarding the future and economic activity conducted in relatively unregulated markets generates financial and economic instability. Financial markets are disequilibrating forces (so financial crises are systemic rather than accidental events) and economic activity depends on the pace of investment (as investment determines aggregate demand and how viable the debt structure is). But investment depends on the subjective evaluation of its profitability.
4. **International financial instability: tamers vs tigers**

Monetary and financial authorities (the tamers) and global finance (the tigers) pursue goals that sometimes are contradictory: authorities pursue *financial stability*, whereas financial markets pursue *profits by embracing risky undertakings*. By pursuing goals that are not always mutually consistent, they maintain a relationship which is often confrontational and even conflictual. Monetary and financial authorities (treasury or finance ministries and central banks) appear to have accepted the following ideas.

- Global financial markets are viewed as fundamental elements for the growth of the world economy.
- Accordingly, they should be allowed to *operate freely* within a transparent and sound regulatory framework that does not distort the functioning of global financial markets.
- Monetary and financial policies must aim at providing a stable monetary and financial environment for the economy, which is viewed as a prerequisite to achieve a sustainable growth of production and employment.
- *Credibility* is an essential feature of monetary and financial authorities. Credible authorities (those ensuring the consistency of announcements and decisions) are more effective in influencing the expectations of the participants in the global markets. Steering expectations in the right direction reinforces policy effectiveness.
- Global financial stability is strengthened by cooperation (preferably in a multilateral institutional framework) among the most important monetary and financial national authorities. Cooperation is a remedy to the mismatch created by the global scope of financial markets and the national jurisdiction of the regulatory authorities.


5. **The international monetary system**

The international monetary system is defined by the set of rules, practices and institutions that organize and regulate economic and financial transactions between different national jurisdictions. At the most basic level, this system establishes:

- exchange rate regimes (anything between fixed and floating exchange rate regimes) between national currencies;
- how to create and transfer *international liquidity*;
- policies to correct balance of payments disequilibria (or other kinds of external imbalances).

6. **International monetary institutions**

These are supranational institutions that have been conferred by national authorities some policy-making and supervisory (limited) as a way to consolidate and make more effective international cooperation.

- Bank for International Settlements (BIS, 1930). Its creation was the first instance of institutional monetary cooperation. It was created by the central banks of the winners of
World War I to manage the flow of war reparations imposed on Germany. The BIS was essentially limited to act as a central banks’ bank and to facilitate monetary cooperation informally. In the BIS, several committees have been established to coordinate central bank activity: the Basel Committee on Banking Supervision (BCBS), the Committee on Payment and Settlement Systems (CPSS) and the Committee on the Global Financial System (CGFS). In parallel, supervisory committees for stock exchanges and capital markets (International Organization of Securities Commissions or IOSCO) and for insurance companies (International Association of Insurance Supervisors or IAIS) have also been created.

- **International Monetary Fund** (IMF, 1946). It was the first truly international monetary authority, endowed with its own statute, powers and financial resources: with some 185 members, it is the only institution of truly global dimensions and scope. In practice, the IMF has exercised its authority rather on the basis of the consensus of its leading members than on the use of its attributed powers. The IMF has acted as a forum for the discussion of international monetary issues, has limited its power to influence economic policies to countries asking for financial aid to the Fund, has managed to exert some influence over financial markets and has become a leading observer of the world economy and evaluator of the economic policies conducted by leading countries. As for developing countries, the IMF serves the purpose of providing a sort of certificate of good conduct for countries that aim to operate in global markets. To halt financial crises and prevent contagion, the IMF can provide financial resources and financial assistance (by drawing on its own resources or helping to mobilize funds from official creditors and private financial institutions). Though the analyses emanating from the IMF may have some credibility or importance for market participants, IMF interventions have systematically being subject to criticisms and the IMF itself accused of making serious judgement errors.

- **G20** (Group of Twenty, 1999. It includes the 19 states in the table below plus the European Union, represented by the European Commission and the ECB. Spain has been accepted as a permanent guest). Created as the G20 Finance forum to share (with developing members) the best economic policy practices (from wealthy members), particularly in regard to international financial stability. The financial crisis of 2008 (which began in a wealthy member in 2007, the US) showed that policy learning had to cease to be one way, as the richer countries no longer could claim superiority in their policies. Since then the G20 has become the hub of international economic governance. Since 2008, the group hosts (i) a summit of heads of government or heads of state and (ii) meetings of finance ministers and central bank governors. The G20 approach to reform global finance has spanned four areas: regulatory reform; improvement of the regulatory co-operation and the oversight of the global financial system; mechanisms to avoid taxpayer bailouts; and design of procedures for risk assessment and implementation of the new financial standards.


Recent crises of global finance

Financial markets are sensitive to information and expectations. That makes financial markets potentially volatile. This volatility is reflected in sharp increases and falls in the price of financial assets and the volume of liquidity that circulates in these markets. Financial crises with international repercussions have predated the current financial globalization wave.

- **European Monetary System crisis, 1992-93.** Exchange rate misalignment crisis, attributed to a competitiveness gap between Germany and the rest of members of the EMS (which had higher inflation rates than Germany) and also to a monetary policy coordination failure. At the time, the successful negotiations in 1991 for what eventually become the eurozone justified the belief that interest rates in the EMS members would converge near the German rate. Betting on that convergence expectation, large inflows came to France, Italy and Spain, whose current rates were higher than Germany’s. Inflationary pressures arising from the spending associated with the German reunification led Germany to raise the interest rate. But the general perception was that not all EMS members could sustain a parallel rise to keep exchange rates in line with the EMS prescriptions. The non-ratification of the Treaty of Maastricht by Denmark and France, and Germany’s unwillingness to loosen its monetary policy, definitively led investors and speculators to bet against the sustainability of the franc, lira, pound sterling and peseta exchange rates. Mass capital outflows from these currencies towards the mark precipitated, in September 1992, the exit of sterling and the lira from the EMS and their depreciation, with other currencies following the same fate later. George Soros emerged triumphant from this bet as ‘the man who broke the Bank of England.’

- **Mexico** (the tequila crisis, 1994-95). Crisis produced in the context of a previous large capital inflow to Mexico (when the US was cutting the official interest rate substantially, from 8% at the end of 1990 to 3% in mid-1992, at this level until the beginning of 1994), a rise of the US interest rate from 3% to 6% between the start of 1994 and the start of 1995 and an unstable domestic political situation (the ruling party’s candidate was murdered in the 1994 presidential election). Large capital outflows during 1995 were caused by doubts about the stability of the exchange rate. The reaction by the monetary authorities did not restore confidence and the final result was the abandonment of the peg with the US dollar on 20 December 1994. The peso depreciated by more than 50% in three months.

- **South-east Asia** (Asian crisis, July-December 1997). This was the first crisis in the era of financial globalization where contagion effects showed an unexpected capacity to spread quickly, and magnify its effects, over a relatively large region. The backdrop of this crisis was a declining interest rate in Japan and Europe. Capital flows tended then to move from
low interest rate economic areas (Japan, Europe and Latin America) towards higher interest rate areas (the emerging countries of Asia and Eastern Europe). Asian economies with good economic prospects (high growth rate, low inflation rate, rising productivity) and apparently successful macroeconomic policies attracted large amounts of foreign investment. The crisis began in Thailand in the early months of 1997, with foreign investors suddenly worrying about the sustainability of the country’s balance of payments. Rumours about the insufficiency of the central bank’s reserves to sustain the peg against the US dollar intensified the capital outflow. The Thai baht was let to float in July. Contagion spread to countries in the region (Indonesia, the Philippines, South Korea, Malaysia), as global investors reconsidered the external position of other countries also apparently suffering from over-investment. Thailand, Korea and Indonesia applied for financial assistance from the IMF. For these five countries, capital outflows took place for the next five years.

- **Russia** (Russian default, August 1998). Contrary to the Asian economies in 1997, Russia had a current account surplus (oil and gas exports in a country endowed with a huge amount of natural resources whose exploitation offered attractive profit opportunities). The ongoing privatization process and the apparent support the Russian government received from western countries helped to attract capital inflows from foreign investors. In early 1998 the declining trend of oil prices in 1997 accelerated. This negative prospect led to a questioning of the sustainability of the exchange rate peg of the rouble, which was let to float on 17 August. In addition, a unilateral moratorium on the servicing of the rouble-denominated debt (much of which held by foreigners) was announced. This episode seemed to stop the interest in investing in emerging economies: private flows fell in 1998 to $76 billion after peaking at $228 billion in 1996 and dropping to $192 billion in 1997.

- **Brazil, 1999.** After the Russian crisis, global investors shifted preference to safer options, like the US (despite the decline in the US interest rate). Brazil was the first to suffer from this preference change. A persistent current account deficit led foreign banks to doubt the sustainability of the exchange rate peg. In January 1999 the Brazilian real was let to float.

- **Turkey and Argentina, 2001.** Turkey let the lira float in February 2001. In December 2001, Argentina declared the suspension of the currency board regime linking the peso to the US dollar and defaulted on its sovereign debt. The severe deterioration of Argentina’s economy reinforced the global trend to quality investment in advanced economies.

- **Global financial crisis, 2007-08.** Triggered by the bursting of the US housing price bubble (subprime crisis). Between March and September 2008, eight major US financial institutions failed: Bear Stearns, IndyMac, Fannie Mae, Freddie Mac, Lehman Brothers, AIG, Washington Mutual and Wachovia (six just in September). More than 20 European banks, across 10 countries, were rescued between July 2007 and February 2009. Major financial markets suffered shortages of liquidity: a ‘sudden stop.’ The global financial system was, for the first time in 80 years, on the brink of collapse. Massive bailouts from governments and central banks aborted a global financial breakdown. Yet the US and most advanced economies suffered from came to be called ‘The Great Recession,’ the result of a widespread deleveraging process (adjustment of the level of borrowing to diminished revenues).
• Explanations of the crisis: (i) ‘too much liquidity’ as the result of excessive expansionary monetary policies in the US; (ii) a ‘global savings glut’; (iii) individual misbehaviour (greed: too many people trying to make double-digit returns in a single-digit growing economy); (iv) bad policies (policymakers should have known better how to tame speculation, financial deregulation was excessive or insufficient, financial regulators were complacent). This global financial crisis can be seen as a consequence of the failure to endow a globalized economy with credible global rules, at least regarding international financial relations and macroeconomic policies. Global finance and global trade call for global regulation and global cooperation.


Stylized stages of a boom, bubble, bust, and recovery  US household wealth with respect to GDP

Rapp, Donald (2015): *Bubbles, booms, and busts: The rise and fall of financial assets*, pp. 19 and 24

Shares of consumption & wages in GDP (US, EU, Japan)  Rates of profit & savings (US, EU, Japan)

Rapp, Donald (2015): *Bubbles, booms, and busts: The rise and fall of financial assets*, p. 25
8. The efficient market hypothesis: the orthodox representation of financial markets

The efficient market hypothesis, held by orthodox economists, views financial systems as mechanisms that, left to themselves, reach an optimal steady state equilibrium. According to this view, asset market prices always and everywhere correctly reflect the assets’ true (or fundamental) value. Asset price movement are simply the market response to external shocks, mainly represented by information changes. As a corollary, asset price bubbles or busts (as commonly understood) do not exist: any observed wild price swings is the market response to a change in the fundamentals (the factors that establish an asset’s true value).

Cooper, George (2008): The origin of financial crises: Central banks, credit bubbles and the efficient market fallacy, Harriman House, Petersfield, UK.

9. The heterodox view of financial markets

The heterodox view regards the financial system as inherently unstable, with no steady state equilibrium and with an in-built tendency to generate boom-bust cycles that severely damage the economic activity in the real sector (production, consumption and employment). In this alternative view, if unregulated, financial markets are engines that create asset price bubbles that are in turn followed by credit crunches. To control this instability, and provide a stabilizing influence on economic activity, central banks must manage credit (debt) creation. The risk is that if this control is not conducted properly, central bank policies (and central bank mistakes) may amplify boom-bust financial cycles and exacerbate the damaging effects on economies. No one knows the ‘equilibrium’ prices in financial markets. The behaviour of market participants tend to move market prices away from equilibrium prices. The advantage of public authorities is that there are better positioned to ascertain the intensity of a market disequilibrium and to take into account the social consequences of allowing disequilibrium states to persist.

- “Blind faith in the efficiency of deregulated financial markets and the absence of a cooperative financial and monetary system created an illusion of risk-free profits and licensed profligacy through speculative finance in many areas.” UN (2009)


10. A policy dilemma for central banks

Central banks face a policy dilemma in a booming/bubble economy: action vs inaction. Suppose borrowing and spending is considered excessive, with indebtedness growing alarmingly and the typical economic agent being reluctant to save. There are two options.

- Option 1: puncture the bubble. The typical measure to try to discourage borrowing and spending is to raise the interest rate. But this rise may result in a sharp contraction in economic activity. In this case, borrowing and spending appears insufficient.

- Option 2: let the boom continue and the bubble burst. If no policy is adopted to control or regulate the high levels of borrowing and spending, a worse contraction may occur when it is realized that the levels of borrowing and spending can no longer be sustained.
Financial activities were liberalized during the 1970s and 1980s. The liberalization transferred the control of the financial sector from the public to the private sector by removing controls over financial flows. The financial liberalization allowed the accumulation and international circulation of large amounts of money and also permitted interest rates to be established in the financial sector itself without substantial public interference. The empirical evidence makes the following sequence appear plausible:

financial deregulation → free mobility of capital and no credit control → debt increase everywhere (by governments, firms, households…) → threat to financial stability → financial crises.

11. Laws of capitalist economies (Michael Hudson)
- “The inexorable tendency of debt to grow beyond the ability to be paid.”
- “There is no way to sustain the rise in debt without killing the economy.”

“Neoliberals say they’re against government, but what they’re really against is democratic government. (...) As Germany’s Wolfgang Schäuble said, ‘democracy doesn’t count.’ Neoliberals want the kind of government that will create gains for the banks, not necessarily for the economy at large. Such governments basically are oligarchic. Once high finance takes over governments as a means of exploiting the 99%, it’s all for active government policy – for itself.”
Hudson, Michael (2017): J is for junk economics: A guide to reality in an age of deception

12. Neoliberalism or governing through markets
Neoliberalism is the doctrine that economic policy is reduced to a basic strategy of ‘leaving it to the market’ and eliminating any public intervention in markets. The last two or three decades has witnessed a shift in economic policy towards neoliberalism. The shifts in economic policy along the neoliberal lines include:
- discarding fiscal policy in favour of monetary policy;
- policy goals no longer concentrating on employment and growth but on inflation and price stability;
- ascribing the causes of unemployment to the operation of the labour market and, in particular, its “inflexibility”;
- unemployment can only be solved through labour market ‘reforms’ and remove their ‘rigidities,’ associated with trade union power, long-term employment contracts, and minimum wage regulations;
• the solution to the unemployment problem does not stem from demand-side policies nor regional and industrial policies designed to tackle structural unemployment;

• the liberalization and deregulation of markets (particularly, financial markets) and the removal of capital controls that regulate the flow of capital between countries.

Arestis, Philip; Malcolm Sawyer (2004): Neo-liberal economic policy, p. 1

13. Two models to explain capital flows from richer to poorer countries (Michael Pettis)

Neo-liberalism is the doctrine that economic policy is reduced to a basic strategy of ‘leaving it to the market’ and eliminating any public intervention in markets. The last two or three decades has witnessed a shift in economic policy towards neoliberalism. The shifts in economic policy along the neoliberal lines include:

• The investment model. This model (the dominant one) posits that the prime determinant of capital flows is the destination of the flows: developed-country investors compare expected profit returns in different countries and decide to invest in less developed countries when the growth prospects there are considered more favourable. It is the characteristics (‘local economic fundamentals’) and policies (‘eliminate distortions’, ‘get the country ready for growth’) of the countries receiving the flows that matter.

• The liquidity model. This model posits that the prime determinant of capital flows is the source of the flows: it is a situation of excess liquidity in the richer countries that stimulates capital outflows to the poorer ones.


Orthodox macroeconomic theory predicts that capital (lending) should flow from the richer to the poorer economies until rates of return are equalized. The Lucas paradox is the observation that such flows are not occurring. Why does not flow from rich to poor countries?

• In a 1990 paper, Nobel laureate Robert Lucas, Jr. estimated that, if orthodox macroeconomic theory were true, the return to investment in India in 1988 should be around 58 times higher than in the United States. Such monumental return differential should make capital to flow from the United States to India. Yet this flow has not been observed.

It is likely that the real interest rate will substantially differ between richer and poorer economies. In a poor economy, by definition, GDP per capita is low and, accordingly, savings are low. In addition, lack of productive capital (which lies behind a low GDP per capita level) implies that the return to capital will also tend to be high. Scarce supply of savings combined with high demand for capital lead to high real interest rates. The reverse is expected to occur in a rich economy. As a consequence, given that capital is mobile internationally, it is natural to predict a flow of funds from richer to poorer economies. One reason why such a flow has not been observed is that investment (lending) in poorer economies is riskier. Hence, it would not
be surprising to observe funds flowing from poorer to richer economies, where investment, despite being probably less profitable, is safer. This will cause real interest rate differences between rich and poor economies to widen rather than to contract.

- Investors may lack relevant information: poorer economies are typically less transparent than richer ones.
- There is also exchange rate risk, that is, that the currency of the poor economy receiving investment will fall with respect to the currency of the domestic economy of the investor. If this fall occurs, the investor incurs a loss when converting the invested funds back into the investor’s currency.
- Investors may believe that the default risk is higher in a poor (less well known) than in a rich (better known) economy. Justification of this belief: poorer economies are weak agents in international capital markets (it is harder for them to obtain foreign funds) and historically they have been politically and/or socially more unstable than rich countries.
- In general, the environment of a poor economy tends to be more unstable or unpredictable. For example, governments may lack credibility insofar as they are prone to make frequent changes in regulations and taxes.

Akhtaruzzaman, Muhammad; Christopher Hajzler; P. Dorian Owen (2017): “Does institutional quality resolve the Lucas paradox?,” Applied Economics, DOI: 10.1080/00036846.2017.1321840

15. The Washington Consensus (John Williamson, 1990)

The Washington Consensus is a set of economic policy recommendations regarding development strategies promoted by the IMF, the World Bank and the US Treasury (all Washington-based institutions). Originally, it was defined by three broad premises: market economy, openness and macroeconomic discipline. The ten original suggested reforms were:

- Fiscal discipline. Reduce large public deficits, which were presumed to lead to balance of payments crises and high inflation.
- Re-ordering public expenditure priorities, towards pro-growth and pro-poor expenditures.
- Tax reform: combine a broad tax base with moderate marginal tax rates.
- Liberalization of interest rates.
- A competitive exchange rate: adoption of an intermediate exchange rate regime (against the two corner doctrine that a country must either fix the exchange rate or let it float freely).
- Trade liberalization.
- Liberalization of inward foreign direct investment.
- Privatization, but paying special attention to how privatization is conducted.
- Deregulation, focusing on easing barriers to market entry and exit.
- Legal security for property rights: ensure access to property rights at acceptable cost.

16. The Beijing Consensus (Joshua Cooper Ramo, 2004)

The Beijing Consensus (the China model or the Chinese Economic Model) expresses a political economy view opposed to the (‘market-friendly’) Washington Consensus. The Beijing Consensus describes the features of the economic development model (of political and economic policies) that China is presumed to have followed in the last decades to develop its economy. The Beijing Consensus suggests new rules for a developing country to achieve fast, stable and sustainable economic growth.

- Ramo’s original core prescriptions were: (i) a willingness to innovate; (ii) equitable growth and sustainable development; and (iii) a strong belief in a nation’s self-determination.
- The China model is often viewed as a resizing of the ‘Singapore model’ (the long-term one-party developmental state), a developmental model combining state capitalism (specifically, foreign investments with government-linked corporations) with one party-rule (the People’s Action Party).


Joseph Stiglitz claimed that ‘making markets work” required more than deregulation policies and low inflation: a robust financial system, to whose creation the government contributes greatly, is necessary for markets to deliver efficient outcomes (as was automatically presumed in the Washington consensus). In Ha-Joon Chang’s opinion, the crucial feature of the Post-Washington Consensus is replacing getting-the-prices-right policies with getting-the-institutions-right policies.

18. Barry Eichengreen’s four main determinants of financial crises and instability

- Unsustainable macroeconomic policies
- Fragile financial systems
- Institutional weaknesses
- Flaws in the structure and operation of international financial markets (booms and busts in capital flows, followed by significant contagion effects, may be caused by information asymmetries, herd behaviour and competitive pressures).

19. Barry Eichengreen’s types of financial instability and possible policy solutions

- Types of financial instability: banking crises, currency crises and twin crises (a banking crisis that occurs at the same time as a currency crisis).
- Policy solutions: (i) reregulation of domestic financial markets to address a banking crisis; (ii) reimposition of capital controls to address a currency crises; (iii) creation of a single global currency; and (iv) definition of an international financial solution. Eichengreen considers the last two as better options in terms of a cost-benefit analysis.
20. The Triffin dilemma (Robert Triffin, 1960)

Triffin predicted the end of the Bretton Woods system, which relied on the credibility of the commitment of the convertibility of dollars into gold. Triffin argued that the system faced a dilemma. On the one hand, to meet the international liquidity needs (which were growing with an expansionary world economy), a sufficient amount of dollars should circulate; that is, foreign dollar balances should increase. But, on the other, a large and growing proportion of foreign dollar balances with respect to US gold reserves endangers the credibility of the convertibility commitment. Hence, if the US international liabilities grow too slowly, global trade is restrained and deflation may ensue; but if the US international liabilities grow too much (to satisfy the demands of a growing international trade), the dollar would lose value against gold and a run on the US gold stock will precipitate the downfall of the system. The chart on the right illustrates how the Bretton Woods system broke down.

21. The safe assets dilemma: A new Triffin dilemma?

The Triffin dilemma was the discovery that the unbalanced growth of certain macrofinancial magnitudes could generate systemic instability. The safe assets dilemma would provide another instance of this principle of instability fuelled by unsustainable growth. Specifically, the Triffin dilemma highlights the possibility that the global demand for a stock (US international liabilities) would outgrow the US official holdings of another stock (gold). The safe assets dilemma points out another financial trouble: the possibility that the global demand for another stock (US Treasury liabilities) would outgrow a flow (the US GDP, a flow that provides the taxes needed to service the Treasury’s debt).

22. Fundamental problems of the international monetary system I: A Triffin general dilemma

Tommaso Padoa-Schioppa suggested in 2010 a ‘Triffin general dilemma’: “the stability requirements of the system as a whole are inconsistent with the pursuit of economic and monetary policy forged solely on the basis of domestic rationales in all monetary regimes devoid of some form of supranationality.” In particular, as during the Bretton Woods era, the US monetary policy strongly influences global monetary conditions; yet, this policy is conducted without taking into account its international repercussions. In general, the US use its privileged economic status to its own advantage, letting the rest bear the costs of the collateral effects the US decisions cause abroad (the global financial crisis, started in mid-2007 in the US, could be a case at hand; the collapse of the Bretton Woods system, another).
23. Fundamental problems of the international monetary system II: Bias against deficit countries

The present international monetary system has a bias against countries with current account deficits. Since countries running a current account surplus have in general no incentive to eliminate the surplus, the burden of the adjustment of international trade imbalances falls exclusively on deficit countries (a point already made by J. M. Keynes). If the deficit countries do not receive the financing need to handle the adjustment or the surplus countries do not pursue more expansionary policies to neutralize the global contractionary effects of the adjustment by deficit countries, the impact of the adjustment on the world economy will be contractionary.

- In connection with this bias, the absence of a cooperative international system to manage exchange rate fluctuations has increased currency speculation and global imbalances.
- Global (or at least multilateral) exchange rate arrangements appear necessary to maintain global stability, to avoid the risk of collapse of the global trading system and to facilitate adjustment in crisis-stricken countries.

24. Fundamental problems of the international monetary system III: Rich-country bias

The present international monetary system is not equitable. Developing countries have a need to accumulate international reserves. These reserves are typically issued by developed (rich) economies. Consequently, developing countries are compelled to transfer resources to developed countries to obtain international reserves. Financial liberalization and the procyclical nature of the capital flows destined to developing countries (foreign capital quickly flies from a developing country with disappointing growth performance) have magnified the inequity bias. In this context, developing countries have been forced to accumulate international reserves in excess as a precaution against sudden or intense contractions in international financing.

- In that respect, it appears that, from the point of view of developing countries, the first role of international financial institutions should be the ability to counteract the procyclical effects of financial markets.
- Not paradoxically, the same financial markets that create trouble in developing countries subject those countries to crisis ratings reinforcing the rich-country bias.

25. Lessons from debt crises in developing countries

- The crisis is preceded by massive net inflows of foreign capital (taking many forms: bank loans, portfolio investment—bonds, shares—and direct investment).
- The foreign funds were mostly used, a few years before the crisis unfolded, to finance growing current account deficits.
- Net outflows (of bank credit and/or portfolio disinvestment) trigger the crisis.
- Intense currency devaluations follow, accompanied by the suspension of foreign debt repayment (public and/or private) and the insolvency of companies and financial institutions.