Diner internacional i sistema monetari internacional

I. SISTEMA MONETARI INTERNACIONAL

1. 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)

Minsky, Hyman P. (1977): "The financial instability hypothesis: An interpretation of Keynes and an alternative to 'standard' theory'", Challenge 20(1), 20-27.

Minsky, Hyman P. (1992): "The financial instability hypothesis", Working Paper 74, The Jerome Levy Economics Institute.

Vercelli, Alessandro (2011): "A perspective on Minsky moments: Revisiting the core of the financial instability hypothesis", Review of Political Economy 23(1), 49-67.

2. 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.

3. 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 confrontantial 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 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.

Saccomanni, Fabrizio (2008): *Managing international financial instability: National tamers versus global tigers*, Edward Elgar, Cheltenham, UK, and Northampton, MA.

4. 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).

5. 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.

Vestergaard, Jakob (2009): *Discipline in the global economy: International finance and the end of liberalism*, Routledge, New York.

6. The Lucas paradox (Robert Lucas, Jr, 1990)

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 does not flow from rich to poor countries?

- In a 1990 paper, Nobel laureate Robert Lucas, Jr. estimated that, if orthodox macro- economic 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

7. Barry Eichengreen's four main determinants of financial crises and instability

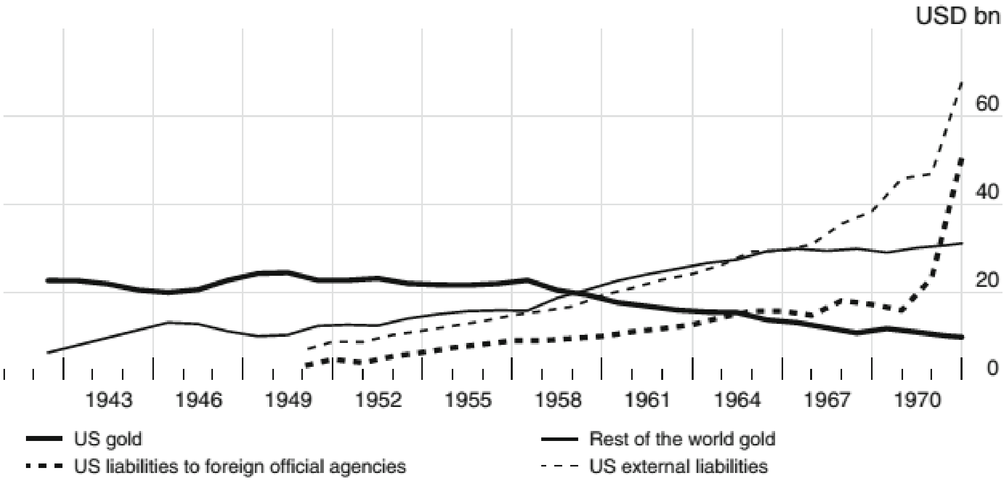
- Unsustainable macroeconomic policies
- Fragile financial systems
- Institutional weaknesses
- Flaws in the structure and operation of international financial markets (booms and busts in capital flows, followed by significant contagion effects, may be caused by information asymmetries, herd behaviour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

8. **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.

9. **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.

10. **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).

11. **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 colateral 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).

Triffin, Robert (1960): *Gold and the dollar crisis: The future of convertibility*, Yale University Press.

Campanella, Edoardo (2010): "The Triffin dilemma again", Economics: The Open-Access, Open-Assessment E-Journal 4, 2010-25. doi:10.5018/economics-ejournal.ja.2010-25.

Pozsar, Zoltan (2011): "Institutional cash pools and the Triffin dilemma of the U.S. banking system", Working Paper 11/190, IMF (also published in Financial Markets, Institutions & Instruments, 2013).

Maes, Ivo (2013): "On the origins of the Triffin dilemma", European Journal of the History of Economic Thought 20(6), 1122-1150.

Bordo, Michael D.; Robert N. McCauley (2016): "The current account version of the Triffin dilemma", Atlantic Economic Journal, DOI 10.1007/s11293-016-9499-1.

Bordo, Michael D.; Robert N. McCauley (2017): "A global shortage of safe assets: A new Triffin dilemma?", Atlantic Economic Journal, DOI 10.1007/s11293-017-9558-2.

Davis, Ann E. (2018): "The new Triffin dilemma", Review of Radical Political Economy 1-8.

"In the last few years, <u>the relative decline of the economy of the United States and the presumed decline of the dollar as an international currency have led scholars to formulate new versions of the Triffin dilemma</u>. The fear is that in the face of a growing demand for currency reserves, mainly from emerging countries, the supply of reserve instruments in dollars, in particular, treasury bonds, will not be able to increase at the same pace. Two different explanations have been provided for this process. The first, closer to the original version of the Triffin dilemma, maintains that <u>the creation of international liquidity by the United States is due to its large and persistent current account deficits</u> (…). <u>Over time, the persistence of these deficits and the corresponding rise in US debt will result in mistrust in the solvency of the United States and its dollar</u>. In this view, the shortage of international liquidity goes hand in hand with the decline in the dollar's standing as an international currency. In another recent version of the Triffin dilemma, the prospect of a lack of international liquidity is due to the fact that, even if US foreign accounts were in balance, <u>the importance of the US economy within the world economy is decreasing</u>. Correspondingly, the impact of US government deficits (and of the securities issued to cover them) on the world economy is decreasing. It follows that the supply of US Treasuries will result in being inadequate to meet demand (…). <u>The two recent versions of the Triffin dilemma may take different paths, but they both come to the same conclusion, namely, that in the coming decades, the world economy will be marked by a shortage of international liquidity and high levels of deflation</u>."

Seghezza, Elena (2018): "Can swap line arrangements help solve the Triffin dilemma? How?", World Economics, DOI: 10.1111/twec.12669.

12. Fundamental problems of the international monetary system II: Bias against deficit countries

The present international monetary system has a <u>bias against countries with current account deficits</u>. 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 adjustement or the surplus countries do not pursue more expansionary policies to neutralize the global contractionary effects of the adjustment by deficit countries, the <u>impact of the adjustment on the world economy will be contractionary</u>.

- 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.

13. 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 pro-cyclical 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 pro-cyclical 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.

14. 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.

15. Shortcomings of the present international monetary system. "These are (1) the large volatility of exchange rates, (2) the wide and persistent misalignments of exchange rates and huge trade imbalances, (3) the failure to promote greater coordination of economic policies among the leading economic areas, and (4) the inability to prevent international financial crises or to adequately deal with them when they do arise."

16. Characteristics of the present international monetary system. "The present international monetary system has four main characteristics: (1) There is a wide variety of exchange rate arrangements (…) (2) Countries have almost complete freedom of choice of exchange rate regimes. All that is required by the 1978 Jamaica Accords (which formally recognized prevailing exchange rate arrangements) is that nation's exchange rate actions not be disruptive to trade partners and the world economy. (3) Exchange rate variability has been substantial. This is true for nominal and real, bilateral and effective, short-run and long-run exchange rates. The IMF (2004) estimated that exchange rate variability has been about 5 times larger during the period of flexible (i.e., since 1971) than under the preceding fixed exchange rate or Bretton Woods System. Exchange rate variability of 2–3 percent per day and 20–30 percent per year has been common under the present system (…) (4) Contrary to earlier expectations, official intervention in foreign exchange markets (and therefore the need for international reserves) has not diminished significantly under the present and more flexible exchange rate system as compared with the previous fixed exchange rate system. Nations have intervened in foreign exchange markets not only to smooth out day-to-day movements, but also to resist trends, especially during the 1970s and since the mid-1980s."

Salvatore, Dominick (2012): "Exchange rate misalignments and the present international monetary system", Journal of Policy Modeling 34(4), 594-604.

Salvatore, Dominick (2011): "The future tri-polar international monetary system", Journal of Policy Modeling 33(5), 776-785.

17. **International monetary system: reform causing instability?** "The monetary system was reshaped in the mid-1940s in the aftermath of the Second World War and again in the early 1970s after the first oil price shock. In both cases, global disruption shook the monetary system and caused prolonged instability. The question now is whether the current system of floating currency blocs with dollar-based trade and reserves can withstand the strains of the global adjustment ahead. It is time to consider alternatives for the IMS and to address the issue of its governance within the context of the postcrisis world economy. The IMS is where tensions from globalization—and the conflict between domestic policy goals and international obligations—tend to coalesce."

18. **Towards a multi-currency system?** "In the US, domestic priorities for growth and employment may lead to an attitude of 'benign neglect' vis-à-visthe dollar, which generally results in a weaker dollar. The current strength of the US currency, which reflects global risk aversion, with investors attracted to the dollar because of its role as key reserve currency, undermines this stance. Meanwhile, China—now the world's largest exporter as well as the largest holder of dollar assets—faces inflationary pressures as a result of keeping its currency anchored to the dollar, yet fears the instability and losses in reserve values that a loosening of the link would entail. China is also creating tensions by keeping its currency undervalued while preparing for its internationalization (…)At the same time, it has clearly shown the euro area's unwillingness to take the burden—and responsibility—that goes with issuing the world's second reserve currency. In this context, dialogue and policy cooperation play an important role in helping these countries to coordinate their efforts and rebalance the world economy. Policy cooperation should aim to avoid any protectionist reaction to exchange rate movements. It should also help prepare the ground for a smooth transition to a multi-currency system by fostering the exchange of information among the world's main trading areas. That the system—or non-system—was no longer adequate, given the complexity of a burgeoning world economy, has been clear for some time."

    "… in today's larger and more integrated world economy the dependence on the dollar as the basis of both trade flows and financial reserves has clearly become excessive, creating a system that is fundamentally unbalanced (…) The existing IMS needs to evolve into a multicurrency system in which a number of international currencies, ideally representing the main trading areas, have the functions of storing value and providing the unit of measure. A multicurrency system would respond more flexibly to the demand for liquidity and would provide a way to diversify the accumulation of reserve assets. Such a system would be better suited to a multipolar world economy."

Subacchi, Paola (2010): "Who is in control of the international monetary system?", International Affairs 86(3), 665-680.

19. **International monetary system: power redistribution.** "Major developments have dramatically shifted the distribution of power in the system. Many have noted that power is now more widely diffused, both among states and between states and societal actors. Finance is no longer dominated by a few national governments at the apex of the global order. Less frequently remarked is the fact that the diffusion of power has been mainly in the dimension of autonomy, rather than influence (…) While more actors have gained a degree of insulation from outside pressures, few as yet are able to exercise greater authority to shape events or outcomes. Leadership in the system thus has been dispersed rather than relocated—a pattern of change in the geopolitics of finance that might be called *leaderless* diffusion. A pattern of leaderless diffusion generates greater ambiguity in prevailing governance structures. Rule-setting in monetary relations increasingly relies not on negotiations among a few powerful states but rather on the evolution of

custom and usage among growing numbers of autonomous agents—regular patterns of behaviour that develop from longstanding practice."

"The diffusion of power, however, has been mainly in the dimension of autonomy, rather than influence—a pattern of leaderless diffusion in financial geopolitics. The days of concentrated power in a largely state-centric system are now over. Three major developments share principal responsibility for this change: (1) the creation of the euro; (2) the widening of global payments imbalances; and (3) the globalization of financial markets."

"The dynamics of power and governance in global finance today are indeed changing. A leaderless diffusion of power is generating greater uncertainty about the underlying rules of the game. At the state level, governments increasingly question the need for a strictly national currency. At the systemic level, governance now relies more on custom and usage, rather than intergovernmental negotiation, to define standards of behaviour."

Cohen, Benjamin J. (2008): The international monetary system: diffusion and ambiguity, International Affairs 84(3), 455-470.

20. **International monetary system: status quo prevails.** "For quite some time the international monetary system has been incapable of delivering external balances or facilitating smooth adjustments of large imbalances. There is a convergence of interests for the status quo: the United States is keen to preserve the benefits it receives as the key-currency country, while creditor countries continue to accumulate dollar-denominated assets and sterilize increases in the foreign component of the monetary base."

Fratianni, Michele (2012): "The future International Monetary System: Dominant currencies or supranational money? An Introduction", Open Economies Review 23(1), 1-12.

21. **The collapse of the international monetary system (1973).** "The structural causes of the present international monetary crisis remain the same that have been debated interminably, and ineffectually, for more than a decade, i.e. the easy financing of persistent U.S. balance-of-payments deficits by foreign accumulation of U.S. dollars as international reserves, and the consequent suppression of adjustment pressures on the surplus countries as well as on the U.S. This finally exploded in the unprecedented magnitude of such disequilibria and financing over the years 1970-1972."

There was at the time "broad intellectual consensus on two basic, commonplace principles: (1) the need for an effective adjustment mechanism, precluding persistent disequilibria in any country's balance of payments; and (2) the need to adjust, and limit, world reserve creation to the non-inflationary requirements of world economic growth."

Triffin, Robert (1973): "The collapse of the international monetary system: Structural causes and remedies", De Economist 121(4), 362-374.

22. **A proposal for supranational bank money.** "We adapt the basic principles of the Keynes Plan and argue for the creation of a supranational bank money (SBM) that would coexist along side national currencies and for the establishment of a new international clearing union (NICU). These principles remain timely because the fundamental causes of the instability of the international monetary system are as valid today as they were in the early forties. The new supranational money would be created against domestic earning assets of the Fed and the ECB and its quantity would be demand-driven (…) The financial tsunami that hit the world economy in 2007–2008 provides a unique opportunity for a coordinated strategy."

23. **Strategies for a future international monetary system.** "At this time, there are (at least) two strategies for the future of the IMS, a conservative strategy and an active one. The former aims at preserving the status quo; the underlying assumption (…) is that the IMS, to work well, must be based on a key currency issued by a dominant country with a deep financial market and a range of short-term instruments

accessible by nonresidents (…) The trouble with the conservative strategy is that it has no *coherent* method to arrest the deterioration of the dollar standard or to accelerate the replacement of the dollar by another key currency. The euro has grown as the second most important international currency but the incomplete financial and political integration in Euroland prevents the euro from replacing the dollar as the dominant international currency. The second strategy, the active one, is based on two pillars. The first is that there is an alternative to the hegemonic key-currency situation in the form of a cooperative decision-making process (…). The second is that a progressive reduction of the dual role of the dollar as a national and international currency can be obtained by introducing a supranational money, albeit gradually. The Keynes Plan for the postwar international financial system fits into this category."

Alessandrini, Pietro; Michele Fratianni (2009): "Resurrecting Keynes to stabilize the International Monetary System", Open Economies Review 20(3), 339-358.

24. Recommendations to avoid financial crises. "Many of the best minds among economists and the financial community have expressed their views on recent international financial crises and the design of a new financial infrastructure. While there is widespread agreement on what happened, there is much less convergence on what should be done about it. Still, we can identify a common core of proposals (…), as well as a number of issues on which economists disagree. Abusing terminology, let us call the former the 'consensus view'. The seven pillars of the consensus view. Most recommendations concur on a number of desirable steps:

• Elimination of currency mismatches. A high level of indebtedness in foreign currencies makes a country very vulnerable to a depreciation in the exchange rate and to the concomitant liquidity and solvency risk faced by domestic banks and firms. Along with this, the absence of countrywide risk management confronts monetary policy with an unpalatable dilemma. A tight monetary policy, to maintain the exchange rate, runs the risk of a severe recession, while a loose monetary policy leads to depreciation of the currency and possibly the bankruptcy of firms and banks that are highly indebted in foreign currency. A common proposal, therefore, is to eliminate currency mismatches, at least at the level of banks and the government. Furthermore, many suggest that a domestic buildup of international reserves would reassure foreign investors about the value of their investment.

• Elimination of maturity mismatches. To prevent hot money from fleeing the country, many advocate a lengthening in debt maturity, as well as measures encouraging alternatives to short-term debt, such as foreign direct investment (FDI) and investment by foreign bank subsidiaries.

• Better institutional infrastructure. In response to the poor governance that has marred many crisis countries, the consensus view argues that infrastructure-promoting reforms, such as adherence to universal principles for securities market regulation designed by the International Organization of Securities Commission (IOSCO) and those for accounting designed by the International Accounting Standards Committee (IASC), would reassure foreign investors and help prevent crises.

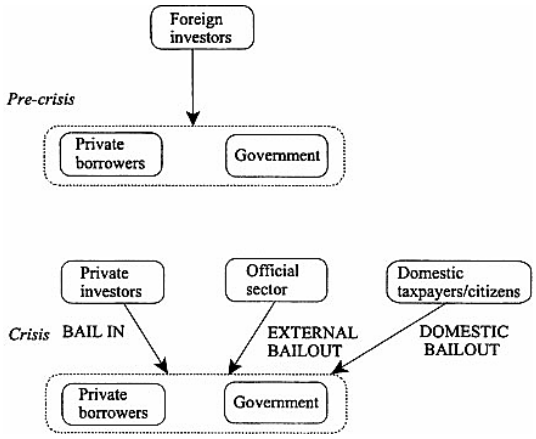
• Better prudential supervision. Most crisis countries' prudential regulations satisfied the international standards as defined by the Basle Accord (…) Enforcement of the standards in a number of crisis countries has been highly negligent, resulting in low capital adequacy and high values at risk. The consensus view calls for a better enforcement of existing prudential regulations.

• Country-level transparency. Most economists recommend that foreign investors be informed in a uniform and regular manner of the country's structure of guaranteed debt and off-balance-sheet liabilities.

• Bail-ins. There is widespread agreement on the desirability (although not on the feasibility) of forcing the foreign investors to share the burden in a case of crisis. The argument is that bailing-in the investors will force them to act in a more responsible manner in lending only to countries with good fundamentals.

• Avoid fixed exchange rates. (…) The broad consensus is that fixed exchange rates work poorly under financial deregulation and that countries with open capital account should choose between floating rates and hard pegs.”

25. Moral hazard problems: who bears the burden of a financial crisis? “… there are three possible victims: the domestic taxpayers, the foreign investors whose equity value is depreciated or debt claim is in default or renegotiated, and the ‘official sector’ (which we define here as IFIs [international financial institutions] plus advanced countries’ Treasuries) that can lose money in attempting rescues (…) The burden sometimes falls entirely on domestic taxpayers.”

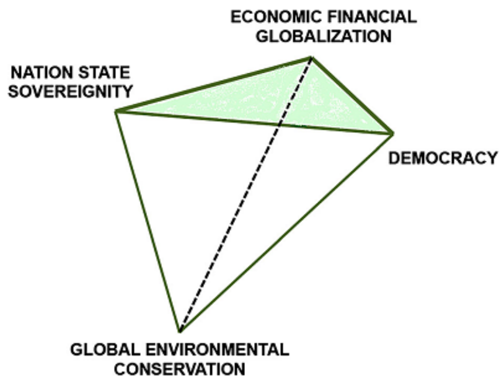


Tirole, Jean (2002): *Financial crises, liquidity, and the international monetary system*, Princeton UP.

26. Duality in the global economy. “Two major dichotomies have made the international economy increasingly vulnerable to the kind of crisis that the world is currently experiencing. The first one is the contrast between, on the one hand, a ‘rule-based’ international trading system with a strong international organization at the center, and, on the other hand, a purely ‘market-based’ international financial system. The second one is while finance has been fully globalized, monetary policy has remained firmly national (or regional in the case of the Euro-zone) without any set of common mechanisms or rules or objectives at the international level. The origins of today’s economic and financial crisis are as much intellectual as they are political and institutional. The quality and the scope of the debate will determine the success or failure of innovation at institutional and policy levels.”

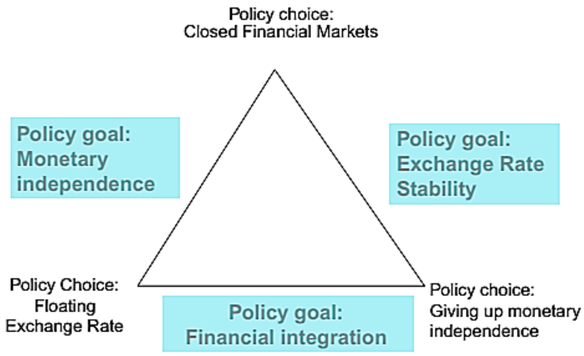
Hieronymi, Otto; ed. (2009): *Globalization and the reform of the International Banking and Monetary System*, Palgrave Macmillan UK.

27. Quadrilemma in climate change international negotiations. “Current global climate change negotiations face some contradictions that are not always addressed as they are considered politically incorrect. These include, first, the decoupling of commitments for planetary environmental policies with the actual national strategies. A relevant example is the Bolivian administration, which presents a strong rhetoric for biospheric Mother Earth Rights, but its national development strategies generate more environmental impacts and weaken enforcement at the local level. Second, the core ideas and beliefs that explain development varieties that generate climate change are deeply rooted, so changes in political ideologies, either from traditional ‘left’ or ‘right’, do not determine policies to effectively overcome climate change. Third, accumulation of scientific information is not enough to promote the necessary changes, because these deep roots conditioned perceived and acceptable alternatives. Fourth, this lead to tensions among the pursuit of economic financial globalization, the sovereignty of the nations-states, democracy, and the basement of global environmental conservation. This is a quadrilemma, because if one or two of these objectives are pursued, at least one other is violated. Nevertheless, international negotiations rest on wishful thinking that this is possible. Uncovering these contradictions is politically incorrect for many realms.”



Gudynas, Eduardo (2016): “Climate change, the quadrilemma of globalization, and other politically incorrect reactions”, Globalizations, DOI: 10.1080/14747731.2016.1162995

28. A policy quadrilemma. "The policy Trilemma (the ability to accomplish only two policy objectives out of financial integration, exchange rate stability and monetary autonomy) remains a valid macroeconomic framework. [See the picture below] The financial globalization during 1990s–2000s reduced the weighted average of exchange rate stability and monetary autonomy. An unintended consequence of financial globalization is the growing exposure of developing countries to capital flights, and deleveraging crises. The significant costs associated with these crises added financial stability to the Trilemma policy goals, modifying the Trilemma framework into the policy Quadrilemma. Emerging markets frequently coupled their growing financial integration with sizable hoarding of reserves, as means of self-insuring their growing exposure to financial turbulences. The global financial crisis of 2008-2009 illustrated both the usefulness and the limitations of hoarding reserves as a self-insurance mechanism. While modifying the global financial architecture to deal with the challenges of the 21st century remains a work in progress, the extended Trilemma framework keeps providing useful insights about the trade-offs and challenges facing policy makers, investors, and central banks."



Aizenman, Joshua (2013): "The impossible trinity: From the policy trilemma to the policy quadrilemma", Global Journal of Economics 2(1) 1-17

29. Triffin's dilemma (Robert Triffin). After World War II, the growth of the global economy needed an increase in international liquidity; that liquidity came from the US foreign deficit; running a persistent foreign deficit tended to erode the confidence in the dollar as an international reserve currency; and that erosion tended to create instability. As a result, the dollar as an international currency could not permanently fulfill two functions: provide liquidity and ensure stability.

30. Collapse of the Bretton Woods system. Triffin's dilemma offered a theoretical argument for the eventual demise of the Bretton Woods system: the fear of a dollar collapse. The global macroeconomic context in which the demise ultimately took place was characterized by: (i) increase in the international flows of private capital; (ii) large and growing external imbalances; and (iii) undervalued currencies.

Eichengreen, Barry (2008): *Globalizing capital: A history of the International Monetary System*, Princeton UP.

Eichengreen, Barry (2011): *Exorbitant privilege: The rise and fall of the dollar and the future of the International Monetary System*, Oxford UP.

Salin, Pascal (2016): *The International Monetary System and the theory of monetary systems*, Edward Elgar.

Wang, Jingyi (2016): *The past and future of International Monetary System, with the performances of the US dollar, the euro and the CNY*, Springer Singapore.

Grabel, Ilene (2019): "Continuity, discontinuity and incoherence in the Bretton Woods order: A Hirschmanian reading", Development and Change 50(1), 46-71.

Dooley, Michael; David Folkerts-Landau; Peter Garber (2009): "Bretton Woods II still defines the International Monetary System", Pacific Economic Review 14(3), 297-311.

Hall, Stephen G. (2011): "The debate about the revived Bretton-Woods regime: A survey and extension of the literature", Journal of Economic Surveys, 1-24.

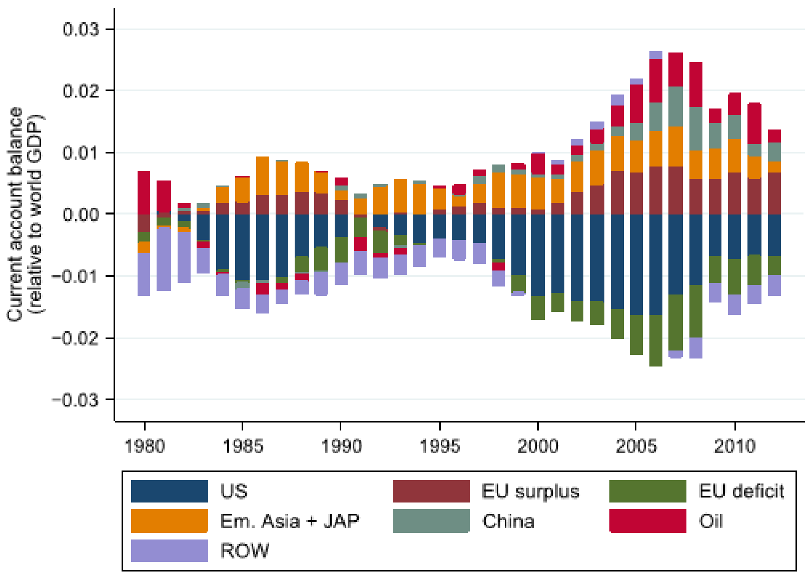
Mandilaras, Alex S. (2015): "The international policy trilemma in the post-Bretton Woods era", Journal of Macroeconomics 44, 18-32.

Chen, Chih-huan; Ching-chong Lai (2010): "An interpretation of the collapsing process of the Bretton Woods system", Open Economies Review 21, 449-463.

Endres, Anthony M. (2011): *International financial integration: Competing ideas and policies in the Post-Bretton Woods era*, Palgrave Macmillan.

31. Stylized facts of current global trade and finance

- In the period 1985-2012, foreign direct investment (FDI) become more volatile and grew faster than exports (in the period 1975-1985, trade grew faster).
- Persistent global imbalances appear to contradict the free trade doctrine: in the post 1985 era, external deficits by (mostly) developed countries are matched by external surpluses by (mostly) developing countries. The US has accounted for a large share of global external deficits, whereas China has accounted for a large share of global external surpluses.
- The above facts have coincided with an extraordinary growth of transnational corporations. Intra-firm trade of transnational corporation seems to represent one third of global trade.
- Financial globalization dwarfs trade (and FDI) globalization. World GDP itself is many times smaller than the value of non-FDI financial capital flows, most of which is speculative capital.
- For certain internationally traded commodities, it is no longer true that developed countries employ the newest production technologies, plants or equipment. In some industries, developing countries enjoy a double advantage over developed countries: lower wages and more productive technologies.



Ron Baiman (2017): *The global free trade error: The infeasibility of Ricardo's comparative advantage theory*, Routledge, London and New York.

Andreas Steiner (2016): *Global imbalances, financial crises, and central bank policies*, Academic Press, London, pp. 6, 8.

32. Common features of global economic crises (1870s, 1930s, 2000s).

"First, all three happened during the periods (the 1870s, 1930s and 2000s) when the 'free market' model of capitalism was the dominant form of economic and social organization in many of the world's leading economies and, as a result of their global influence, in the ascendancy internationally.

Second, thanks to its dominance in these countries, the same ideology also permeated international economic relations, determining the regimes for trade, payments and long-term capital flows. Independent states were under pressure from the most powerful countries to liberalize their trade and/or join international monetary unions irrespective of their levels of development and, therefore, their ability to compete with more advanced economies. The outcome was therefore the same in all three periods: large increases in inequalities of income and wealth, both nationally and globally, causing widespread breakdowns in social cohesion and political consensus.

Third, despite significant increases in international economic interdependence, no effort was made during the three periods to create a framework of global institutions that would help nation states solve through cooperation problems that were beyond the capacity of any one country to resolve in isolation (...) An important reason behind the drive by transnational corporations for the liberalization of trade and capital movements is that it enables them to avoid (...) effective regulation and supervision by national governments. Not surprisingly, there has been a significant increase in the frequency and scale of international financial crises since the early 1980s (...). The creation of a global market without a global political authority is, therefore, the nearest equivalent to a world of laissez-faire in which those who control giant transnational enterprises, rather than democratically elected governments, effectively set the rules that determine how and in whose interests the economic system operates."

"Fourth, the problem (...) is that this is a form of global economic interdependence and international relations that is unsustainable. Economic success at all levels of development requires (...) an ideology and institutions that promote a harmony of interests, consensus and cooperation. Globalization makes such a requirement even more imperative at the international level (...) The more cooperative form of capitalism (social democracy) demonstrated after the Second World War both nationally and internationally (...) the extent to which different outcomes are possible within a market-based economy (...) The post-war experience demonstrated an important fact: in its *social democratic* form, capitalism was able to achieve, in the small number of countries that adopted it, the highest levels of economic, social and political wellbeing that humanity has ever experienced."

Panić, Milivoje (2011): *Globalization: A threat to international cooperation and peace?*, Palgrave Macmillan.

33. **Core, periphery, semi-periphery.** "World-systems theorists hold that the division of labor in the capitalist world economy divides production into core-like products and periphery-like products, and states into statuses of core, periphery, and semi-periphery. The core specializes in the production of the most advanced goods, which involves the use of the most sophisticated technologies and highly mechanized methods of production (capital-intensive production). The core states are the most economically and politically dominant, militarily powerful, and administratively well organized in the world-system. At the other extreme, the periphery specializes in the production and export of raw materials and labor-intensive goods. The peripheral states are militarily and organizationally weak. Between these two extremes are those states in the semiperiphery. They have some economic activities similar to those of the core (core-like production) and some more typical of the periphery (periphery-like production). Some world-systems theorists suggest that the semi-peripheral states play a critical role as 'buffer zones' or 'intermediaries' between the core and the periphery. World-systems theorists view the nature of the economic relationship between core and periphery in some aspects similarly to dependency theory; that is, the trading relationship is fundamentally exploitative."

34. **Capitalism, power, democracy.** "Capitalism is premised upon two kinds of power: (1) private economic power that comes from the control of property and profit-making; and (2) coercive power exercised by states in (and often beyond) bounded national territories (...) It may be that liberal democracy needs capitalism, but it is definitely not the other way around. In fact, whatever anticapitalism's prospects, the future of anything like democracy will depend very much on which of the terms dominates the capitalism-democracy pairing. Even if in the short term it seems democracy is tied to capitalism, there is clearly no necessary mutual dependence between the two. What is certain is that we can no longer leave democracy to the capitalists."

35. **'Long Boom' and 'Longer Downturn'.** "The quarter-century or so following World War II is often called capitalism's 'golden age' or the Long Boom—an era during which the capitalist global North (western and northern Europe, North America, and—confusingly—Australia and New Zealand) experienced unprecedented economic growth, low unemployment, increased average living standards, decreasing income and wealth inequality, and a vast expansion of what we now call the welfare state. The following fifteen years or so, however, roughly 1967–82, saw the whole thing seemingly go to pot. Many thought that capitalism itself was in its death throes. These years inaugurated a process we might call the Long Downturn, a trajectory which, depending upon one's data and interpretation, continues today."

36. **Bretton Woods system.** "Bretton Woods (...) had three main formal aims: to promote and fund postwar European reconstruction (...); to secure the political stability of debtor nations (the UK in particular (...));

and to stabilize the international monetary regime, which was (correctly) understood to be crucial to the first two goals. Forty-four nations, including the most powerful states in the world and led by the US (which emerged from the war the clear capitalist hegemon), signed the agreements. According to their architects, the institutions would work as follows: The IMF, using funds contributed by all nations, would provide low-interest loan coverage to debtor states to prevent default during reconstruction and reconversion (…). The World Bank would provide loans or grants for the reconstruction of European (and, eventually, Japanese) economies, a flow of funds greatly enhanced by the US's Marshall Plan, which rebuilt German industry remarkably rapidly in the 1940s and 1950s (…). To make all this possible, the international monetary regime was stabilized via a system of 'fixed' exchange rates between all major currencies, so all capitalist nation-states had the value of their moneys 'pegged' to a specific rate against the US dollar (unsurprisingly, China and the Soviet Union were not signatories). The foundation of the system lay the US dollar's anchor to a gold standard. In other words, its value was pegged to gold, which made the US responsible for the stability of the regime as a whole. Every US dollar was to be backed by—exchangeable for—gold: 1 troy ounce for every 35 US dollars, to be precise."

"The Bretton Woods monetary scheme was a system in which all capitalist moneys could in theory move securely in the international realm because their values, and the stability of the economies in which they were based, were guaranteed by an institutional backstop in the form of the IMF, the World Bank, and the general context of American economic power. No need for frantic currency trading, no fears of massive devaluation or overvaluation, and no way for speculators to manipulate or exacerbate exchange rate fluctuations. This is the political economic regime within which the 'welfare state' emerged."

37. **Long Boom.** "… the Long Boom (…) from a growth, social security, income equality, and wage-rate perspective, (…) was more successful than any previous international or national mode of economic organization—capitalist or noncapitalist. Of course, not everyone enjoyed the fruits of this 'success.' It entailed—indeed, it depended upon—a vastly unequal distribution of political economic power and the further geographical concentration of wealth in the global North."

38. **Long Downturn.** "The Long Downturn is closely associated with the collapse of the Bretton Woods regime, since many of the dynamics it was designed to suppress or eliminate in the mid-1940s raised their ugly heads two decades later. By the late 1960s, the fixed-exchange-rate regime was falling apart. Food and commodity prices rose, driving inflation and inviting speculation. Oil prices skyrocketed (rising 400 percent), and the advanced capitalist world experienced a severe decline in productivity growth (the increase in output per unit of labour). This slower rate of growth ignited distributional conflict between labour and capital, and between different fractions of capital. This fanned the inflationary flames higher, as different social groups and classes fought to retain their piece of the income pie, exacerbating political instability."

    "… the crisis that ended the good ol' days of the Long Boom was a distributional struggle (…) This struggle had two fronts: (1) a struggle between labour and capital over the distribution of income—an increasingly empowered labour-force wanted more of it; (2) a struggle between nationally based capitalists over the distribution and control of productive power and international market share. One might also add: (3) conflict between highly developed rich countries and resource-rich but less powerful countries (…) States played a key role in these developments, mostly by attempting to manage or contain the distributional conflict."

39. Neoliberalism or governing through markets

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:

- 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

40. 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 persumed 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.

Serra, Narcís; Joseph E. Stiglitz; eds. (2008): *The Washington Consensus reconsidered*: *Towards a new global governance*, Oxford University Press, Oxford, UK.

41. 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).

Li, Jun; Liming Wang (2014): *China's economic dynamics: A Beijing Consensus in the making?*, Routledge, London and New York

42. The Post-Washington Consensus (Joseph Stiglitz, 1998)

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 pressumed 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.

43. Debt cancellation ('clean slate')

In ancient civilizations debt cancellation was a policy preventing the financial sector from ruining the whole economy: ancient policy-makers discovered that debt (which can accumulate exponentially) can quickly surpass the economy's ability to pay. Periodic debt cancellation was a standard measure of financial regulation in ancient societies.

- An example of this policy occurred around 1792 BC in Babylonia under King Hammurabi. At the time, barley was the basic foodstuff households consumed. Households runned up debts denominated in barley as liabilities for crop-sharing rents and water fees. These debts, owed to the temple-state public financial system, were forgiven, but not the debt denominated in silver (already 'the money of the world'), incurred by traders as commercial debt.

M Hudson; C Wunsch (2004): *Creating economic order: Accounting in the Ancient Near East.*

44. Inventions and innovations tend to occurs first in the public sector and are later transferred to (appropriated by) the private sector

Detailed public accounts survive from Bronze Age societies (Near Eastern societies), but not for later ones, such as Greece and Rome (Western societies). Economic decentralization progressed and private agents and organizations acquired and exercized more economic control. The knowledge of how to manage economic affairs initially developed by public institutions ('the temple' and 'the palace' created bureaucracy and accounting practices to measure and quantify economic activity and to more efficiently squeeze out economic surplus) was later appropriated by private hands in put in full use to create massive fortunes (in Rome, for instance). Mesopotamian history proves that public planning and distribution is not necessarily destabilizing, ineffective, inefficient or self-defeating.

45. Babylonians

The global financial liberalization unfolding since the 1980s coincided (in most developed economies) with financial policies stimulating credit expansion but without enough prudential measures. Banks exploited these opportunities for debt creation by engaging in securities trading (trying to manipulate asset prices), downplaying their traditional functions as deposit takers and credit providers. Public support to banks continued with bank bailouts and the real sector of the economy suffered the consequences (more unemployment, firms closing down, families losing their homes). These policies implicitly considered the lack of credit as the problem, when the real problem is excessive debt: governments helped the creditors (banks) instead of the debtors (families, firms). (When debt is built up, it creates the illusion of wealth.) The inverse of the clean slate policy is policy in support of creditors, which treats the symptom (the credit crisis) not the cause (debt overhead). Allowing creditors to pursue debtors makes economic recovery almost impossible: a debt workout should be preferable to a bank bailout.

Dirk J. Bezemer (2009): "This is not a credit crisis –it is a debt crisis", Economic Affairs.

46. Hypocrisy or challenge of policy paradigm during the 2008 global financial crisis?

The IMF, and most economists, gave support during the 2008 global financial crisis to policy measures different from those (based on unfettered markets and uncontrolled capitalism) advocated during the 1997 Asian financial crisis: bank rescue plans (bank bailouts), bank nationalizations (government purchases of banks), strong expansionary policies (fiscal stimulus plans), near-zero interest rates, massive quantitative easing programmes (purchases of government bonds and other privately-issued financial assets), huge public deficits (two-digit deficit-to-GDP ratios), discussion of more strict financial regulation, consideration of the elimination of tax havens…

Paradox of thrift (Keynes)	Higher saving rates lead to reduced output
Paradox of costs (Kalecki)	Higher real wages lead to higher profit rates
Paradox of public deficits (Kalecki)	Government deficits raise private profits
Paradox of debt (Steindl)	Efforts to de-leverage might lead to higher leverage ratios
Paradox of tranquillity (Minsky)	Stability is destabilizing
Paradox of liquidity (Nesvetailova)	New ways to create liquidity end up transforming liquid assets into illiquid ones
Paradox of risk (Wojnilower)	The availability of individual risk cover leads to more risk overall

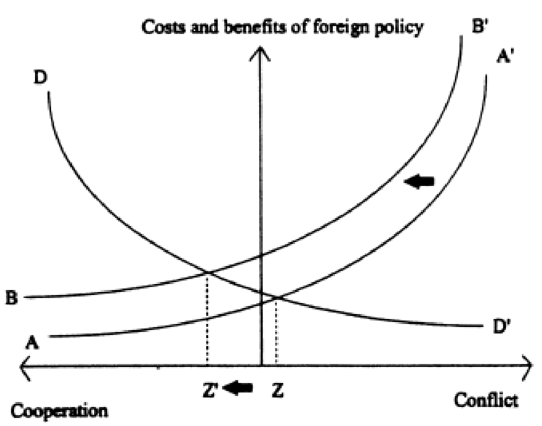
Crisis-related macroeconomic paradoxes (Lavoie 2011, p. 46)

- The policy prescriptions by the most orthodox economists is reduced to close the central banking, dismantle regulations and keep the government budged balanced.
- "When things go really wrong, neoclassical theories are thrown out of the window, being replaced by more pragmatic and realistic theories. With public deficits, governments are hopeful that aggregate demand will be sustained and that corporate profits will recover."

Lavoie, Marc (2011): "The global financial crisis: Methodological reflections from a heterodox perspective", Studies in Political Economy 88(1), 35-57.

47. War and trade.

"Liberal theories generally assume that political leaders are deterred from engain conflict when they anticipate that conflict will disrupt or eliminate trade or adversely affect the terms of trade, so the hypothesis that trade deters war rests on the assumption that war impedes trade. Realist theories suggest that the concern over relative gains will lead at least one of the belligerents to terminate trade in order to prevent its adversary from using the gains from trade to increase its relative military power."



Barbieri, Katherine; Jack S. Levy (1999): "Sleeping with the enemy: The impact of war on trade", Journal of Peace Research 36(4), 463-479.

Barbieri, K. (1996): "Economic interdependence: A path to peace or a source of interstate conflict?", Journal of Peace Research Volume 33(1), 29-49.

Optimal level of conflict

Barbieri, K.; Schneider, G. (1999): "Globalization and peace: Assessing new directions in the study of trade and conflict", Journal of Peace Research 36(4), 387-404.

Barbieri, Katherine (2002): *The liberal illusion: Does trade promote peace?*, University of Michigan Press.

48. **Fundamental political dilemma (Barry Weingast).** "A government strong enough to protect property rights and enforce contracts is also strong enough to confiscate the wealth of its citizens."

Weingast, Barry R. (1995): "The economic role of political institutions: Market-preserving federalism and economic development", Journal of Law, Economics & Organization 11(1), 1-31.

Hanson, Jonathan K. (2014): "Forging then taming Leviathan: State capacity, constraints on rulers, and development", International Studies Quarterly Volume 58(2), 380-392.

49. **World War I, trade and conflict.** "The First World War is often cited as proof par excellence of the flaws in the liberal peace argument because the adversaries it engaged had been each other's major pre-war trading partners. Although commonly assumed to have wreaked havoc on the trade of the states it engaged, the war's impact on commerce has rarely been rigorously examined. Using an original dataset, this study shows that the Great War triggered substitution processes that reduced its trade-related costs. Although recourse to second-best alternatives always induces efficiency losses, the costs of adjustment were small relative to the other costs that states incurred during the war. The analysis shows that the Great War is not the egregious exception to the theory that conventional wisdom has long assumed it to be. At the same time, it makes clear that the deterrent power of trade varies inversely with belligerents' ability to access the markets of alternative trading partners."

Gowa, Joanne; Hicks, Raymond (2015): "Commerce and conflict: New data about the Great War", British Journal of Political Science 1-22.

50. The seven fallacies of the globalization debate (Steingart, 2008)

a. "Fallacy No. 1: The natural progression for a developed economy is to move from an industry-based to a service-based economy (…) If the service and industrial sectors are parts of one and the same family, we cannot separate ourselves from one without destroying the family as a whole (…) if we allow manufacturing jobs to be offshored without blinking, service jobs will soon follow suit."

b. "Fallacy No. 2: Economics and morals have nothing in common (…). Every product is made up of only three things: First, there are raw materials (…). Second, there is knowledge, the know-how (…). Third, there is the set of conditions that enable a company to bring together the raw materials and knowledge. These production conditions—that is, laws, regulations, and a country's unwritten traditions—make up the real difference (…) These values, which are documented thousands of times over in collective wage agreements, company agreements, laws, company regulations, and, to some extent, international treaties, are what make the difference in today's world economy (…) The Chinese ignore Western intellectual property rights and they forbid independent trade unions. Their biggest advantage at present is an endless supply of very cheap labor and a political system that undermines Western regulations. They pay only low costs for environmental protection, they pay nearly nothing for a pension system, and they have very poor standards of health and safety in the workplace. They are willing to do everything for less."

c. "Fallacy No. 3: The new world is flat. (…) Then the unbelievable happened: Mao died and his successors started to reform the country in a very radical way. When the Soviet Union crashed, India followed. Since that time we have seen turmoil in the world labor market. The West's workforce of 500 million suddenly saw itself confronted with an army of 1.2 billion potential employees in the emerging markets. These new workers were willing to work under conditions not much more advanced than those of the mid–nineteenth century. The level playing field had become fragmented. For ordinary people in the West, the world had become anything but flat. The highly developed capitalism of the West now had to compete with a system that favored the crude customs of Manchester capitalism. (…) Under the current conditions free trade often means unfair practices and translates into pressure for those who cannot compete. (…) Most people think Asia is exporting only products, but in fact these countries are also exporting their labor and environmental practices. This is the dark side of free trade."

d. "Fallacy No. 4: The tide of globalization automatically lifts all boats. Many authorities have told this to us, and claim that we don't have to worry. This statement may be true in the long run, but for now it seems to be a fairy tale. It doesn't reflect today's reality. Globalization nowadays is an extremely divisive force for the American population. (…) This is precisely the paradox of globalization: while the competitiveness of American companies is on the rise, the standard of living of the average family is shrinking. Truth number one: globalization connects people. Truth number two: on the same day, and in the same country, it divides society. Economic growth and social decline are no longer mutually exclusive."

e. "Fallacy No. 5: Globalization is a great work of peace. Many people believe this. Nations that are economically intertwined do not shoot at one another. That's the great hope. But the new world is by no means more peaceful than the old. Today's victories are won on the field of business, and from there they are passed on to politicians and military leaders. Giddy with their almost magical successes of the last few decades, the prime ministers of China and India recently declared that their goal is to bring about 'a new world order.'"

f. "Fallacy No. 6: The nation can no longer do anything for the people in its care. Both the left and the right continually emphasize the powerlessness of the national state in the current age. (…) To this date, there is no established framework for globalization, nor is anyone searching for it. In fact, it would appear that the economic system of the West is being given up without a fight. Ironically, the biggest enemy of the market economy is the complacency of its friends and the ignorance of its beneficiaries. A misunderstanding (…) is held up as an excuse for this failure to take action: globalization, it is claimed, is a force of nature, a powerful law of historic progression (…) The powerlessness of national institutions is held up as proof of the omnipotence of globalization.

   (…) If domestic companies had remained within their national borders, no one would have been able to stop their loss of significance. They too faced a choice between decline and expansion. What we are experiencing today is an economy that is expanding worldwide, and those who are complaining the loudest are the ones who have remained within the space once considered their sovereign territory. Economic policy stands at the threshold of a new and unfamiliar world, but it lacks the confidence to cross that threshold. Instead of joining the chorus of complainers, anyone making economic policy should follow in the footsteps of corporations, not just physically but intellectually.

   (…) The state may be exercising restraint in the United States, but it does not do so in India, Singapore, Japan, Korea, and Malaysia, and certainly not in China. In fact, the state plays a dominant role in those countries—the ones currently reporting the most mind-boggling successes. It is the greatest promoter and protector of their export industries, and it organizes and guarantees the conditions that result in the underbidding of Western countries. The rise of China is principally the achievement of politicians, not market forces. (…) The invisible hand of the market, of which Adam Smith spoke, is guided and directed by the iron fist of the state. (…) The Chinese example is not worth emulating, but it does stimulate thought. A new debate over society's understanding of government seems long overdue in the United States."

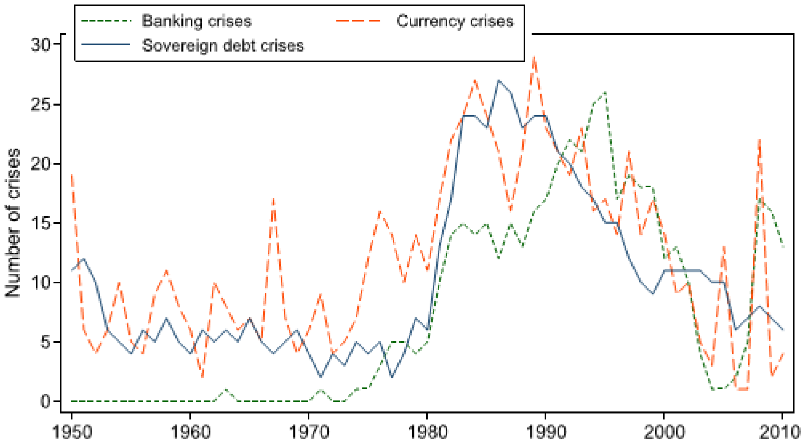
g. "Fallacy No. 7: Globalization is a hot issue. Too hot to handle for a single person? Is the individual almost powerless to do anything to change his or her situation? (…) We are not born to tolerate history, even to tolerate it angrily. In a democracy, we are called upon to shape history: realistically and optimistically, bravely and cleverly. We are at least consumers and citizens, employees and investors, we have purchasing power, the power of taxpayers and political power. The thing we have to learn now is to use these assets properly under the new conditions. The challenge is to figure out how to ensure that globalization serves the people."

III. HEGEMONIA DELS EUA I EL DÒLAR

“It’s our currency but it’s your problem.” (US Treasury Secretary John Connally)

51. Rise and fall of great powers

The rise and fall of great powers appears to be a stylized fact of international relations. It is a process in which the status quo represented by the dominance of some power is challenged by the emergence of a new power. Is it now the turn for the US to fall and for China to rise? Will be system become bipolar? Basic explanations for the fall are: (i) internal instability; (ii) external over-extension.



The basic explanation for the rise is emulation: the states lagging behind the leading powers learn from them how to catch up. In the process of developing and accumulating power, the lead states that first go through this process may attempt several strategies of which some may prove unsuccessful. The less developed or weaker states do not have to replicate failures, since they may just adopt the successful strategies. The laggards do not need to go through all the stages that the leaders initially followed and that allows the laggards to catch up faster and at smaller cost than the vanguard states.

John Glenn (2016): *China’s challenge to US supremacy: Economic superpower versus rising star*

52. A paradox of dominance?

If the global contest for dominance is a zero-sum game, then the resources used by the rising powers are no longer available to the lead states to maintain or expand their dominance. In fact, the economic system created by the dominant powers is used by the challengers to rise: when the profit opportunities become scarce in the lead economies, it becomes an attractive option to invest abroad and that helps less developed economies to develop and close the gap with the richer economies. As it is cheaper to produce in poorer economies, these economies could develop easier and faster by selling their production in the leading economies. Hence, the initial leadership of some economies is accompanied by convergence of the rest of economies.

- “The paradox of power for the USA is therefore that the very economic system that has propelled it on to the world stage also contains within it the potential seeds of its own destruction.” Glenn (2016, p. 2)

53. Balance of power vs hegemony. “Recent work demonstrates that the European state system—which, since the Middle Ages, saw the recurrent formation of balances of power—constitutes a historical exception rather than the rule among anarchic international systems. In this study, I set out to explain why Europe avoided hegemony. I argue that the character of state–society relations at the time of intensified geopolitical competition leads to different systemwide outcomes with respect to balancing and hegemony. Where multiple privileged groups already exist, rulers must negotiate with a range of societal actors to extract revenue and resources for warfare. This further entrenches institutional constraints on rulers and the privileges enjoyed by societal groups, which in turn make it difficult for rulers to convert conquest into further expansion. In the absence of preexisting multiple privileged groups, however, geopolitical competition instead further weakens the ability of societal actors to check their rulers. This dynamic creates a return-to-scale logic that facilitates systemwide conquest. My argument accounts for the diverging trajectories of, on the one hand, medieval and early modern Europe and, on the other hand, ancient China—where the state of Qin eliminated its rivals and established universal domination.”

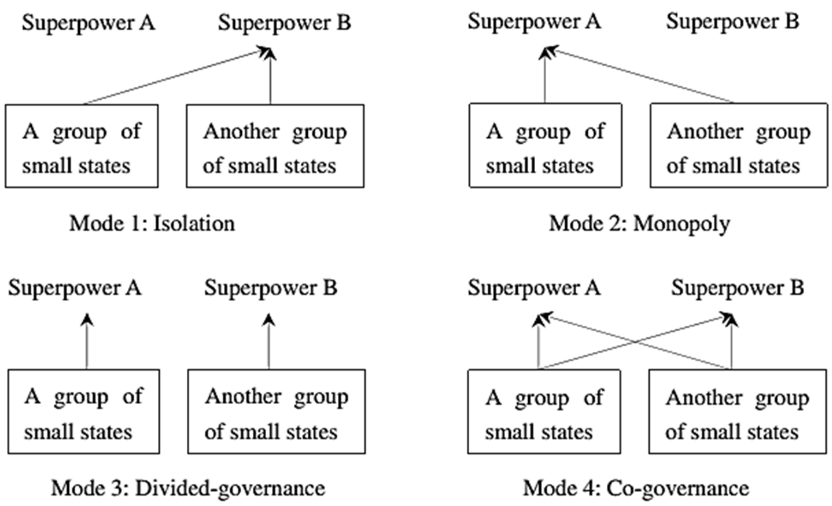
Møller, Jørgen (2014): “Why Europe avoided hegemony: A historical perspective on the balance of power”, International Studies Quarterly 58(4), 660-670.

54. Geopolitical rise of China. “This essay proposes a new theoretical framework for analyzing the rise of China and its impact on Asian security order. While the rise of China is reshaping Asia’s military balance, the region has also witnessed equally important and longer-term changes, especially economic interdependence, multilateral institutions and domestic politics. The implications of these changes are not fully accounted for by the different types of security orders proposed by analysts to describe the implications of China’s rise, such as anarchy, hierarchy, hegemony, concert, and community. This essay presents an alternative conceptualization of Asian security order, termed consociational security order (CSO) that draws from different theoretical lenses: defensive realism, institutionalism, and especially consociational theory in comparative politics. Specifying the conditions that make a CSO stable or unstable, the essay then examines the extent to which these conditions can be found in Asia today. Aside from offering a distinctive framework for analyzing China’s rise, the CSO framework also offers an analytic device for policymakers and analysts in judging trends and directions in Asian security.”

55. Scenarios for Asia’s future. Anarchy: “Asia’s future could be Europe’s past, specifically German expansion and great power competition leading to world wars. Asia is ‘ripe for rivalry’ because it lacks Europe’s conflict-mitigating forces of economic interdependence, multilateral institutions and shared democracy.” Hegemony: “China would impose a ‘Monroe doctrine’ over Asia, excluding the United States”. Hierarchy: “A benign Chinese dominance as prevailed under its tributary system. When China was prosperous and powerful, Asia was stable and peaceful.” Concert/condominium: “A managed balance of power system, either a multilateral concert of major powers, or a Sino-US duopoly (condominium); one such scenario posits China and the United States dominating the Asian heartland and maritime spheres, respectively.” Community: “East Asia moving from a region of nations to a bona fide regional community where collective efforts are made for peace, prosperity and progress.”

Acharya, Amitav (2014): “Power shift or paradigm shift? China's rise and Asia's emerging security order”, International Studies Quarterly 58(1), 158-173.

56. Sino-US interaction (rising vs stablished power): Thucydides trap, Churchill trap or co-ruling? ”The ‘Thucydides trap’ is in a large part an induction of historical experiences on great power politics. In the contemporary era, however, there is small risk of all-out war between a rising power and a hegemonic power. By contrast, the ‘Churchill trap’, whereby the superpowers fall into a long-term confrontation reminiscent of that between the US and the Soviet Union during the Cold War, presents a genuine risk and one that should be taken far more seriously (…) there is a third type of great power relationship between the two poles, which I call ‘co-ruling’, whereby rather than being geographically demarcated according to their respective ‘spheres of influence’, the two superpowers jointly lead all or most of the small and medium-sized countries in the system.”

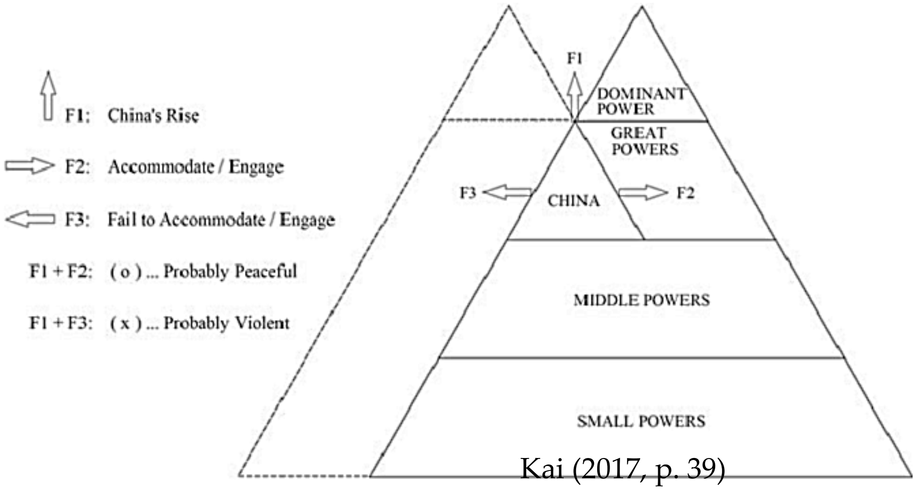


Yang Yuan (2018): "Escape both the 'Thucydides Trap' and the 'Churchill Trap': Finding a third type of great power relations under the bipolar system," Chinese Journal of International Politics, 1-43.

57. Is the future multipolar? "At its peak, U.S. dominance spread to effectively all areas, shaping the global power balance. It was the largest production power, trade power, technological power, financial power, and military power, as well as, of course, the most influential player in global politics. In the new brave world of the early twenty-first century a single nation—be it America, China, or anyone else—is no longer capable of being a champion in all these areas across the board. The world is becoming more and more multipolar and, consequently, increasingly difficult to lead." Tselichtchev (2012, p. 207)

58. Power transition theory (A.F.K. Organski). It is a theory (alternative to the balance of power and collective security theories) that has been used to describe, analyze and predict the power interactions between a dominant but relatively declining power (the US) and a rising challenger (China). The theory represents the international system as a power hierarchy with

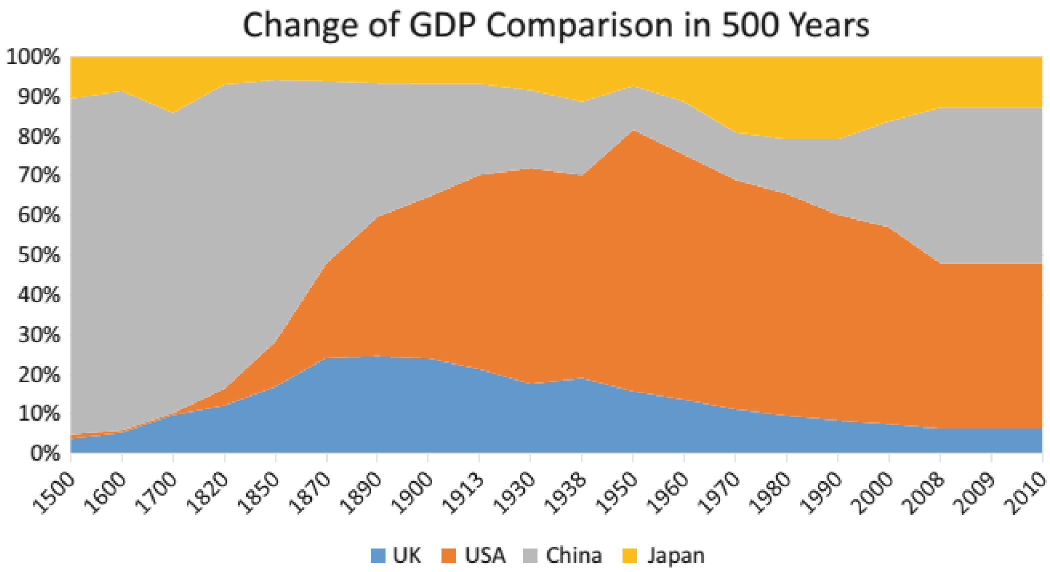
- a dominant state at the top of the hierarchical structure controlling most of the power resources;
- the other great powers below the dominant power: states with the potential to become rivals to the dominant power;
- the middle powers, states that are relatively powerful at a regional level; and
- small powers and 'colonies' at the bottom of the hierarchy.



Kai (2017, p. 39)

Violent conflict, or even war, is most likely to arise when some great power becomes increasingly powerful and dissatisfied with the existing hierarchy or the alliance with the dominant power and challenges the status quo to change the rules or the hierarchy to the challenger's advantage. The chances of a power transition war increase with three factors: (i) the power potential of the emerging power; (ii) the speed with which the emerging power rises; and (iii) the flexibility with which the dominant power can meet the challenge of the rising power.

59. Central dilemma of international relations. E. H. Carr has identified the 'problem of peaceful change' as the central dilemma of international relations.



Kai (2017, p. 59)

60. The dollar in the international monetary system

The international monetary system is currently characterized by a centre (developed countries) and periphery that uses as reserves assets from the centre. The viability of this system depends on its participants to obtain from it what they want or need. Jeanne (2012) identifies three necessary conditions for the viability:

- the centre must provide liquid and safe assets;
- in a sufficient amount to meet the international demand; and
- providing a satisfactory return (global stable store of value).

The US has been so far playing a central role in the international monetary system. Will it continue to do so and for long? The 2008 financial crisis questioned the safety and liquidity of US assets. It is not clear whether the US economy will be strong enough to meet a rising demand for international liquidity. And the decisions by the US authorities on the return on the dollar (the US interest rate) are solely based on domestic considerations and do not take into account whether the decisions ensure that the dollar remains an international stable store of value. Despite all this, it does not appear likely that, in the near future, the international monetary system will become more multipolar (with the central role of the dollar shared with other currencies, like the euro or the renminbi, or replaced by the IMF's Special Drawing Rights).

Jeanne, Olivier (2012): "The dollar and its discontents", Journal of International Money and Finance 31, 1976-1989

61. Why the dollar still rules. "The principle [*sic*] reason why the dollar remains the dominant international currency is that the United States has so far fulfilled three functions in the global monetary system: (1) having open and highly developed financial markets that generate an adequate supply of liquid assets; (2) having a central bank that more or less maintains the value of these assets; (3) running current account deficits that allow it to play the role of global consumer-of-last-resort."

"There are two reasons to doubt that the ECB's relatively conservative monetary policy increased the attractiveness of the euro over the dollar. First (...) the ECB's refusal to buy more sovereign debt securities impaired the liquidity of European financial markets and the ability of the Eurozone to supply safe assets to the global monetary system. If there is one lesson to be drawn from the GFC and the Eurozone crisis for the link between monetary policy and international currency status, it is that sovereign debt can lose its quality as a safe asset when it is not backstopped by the central bank (...). Second, the ECB's relative conservative monetary policy stance has prevented the Eurozone from playing a greater role in the generation of global demand."

Vermeiren, Mattias (2014): *Power and imbalances in the Global Monetary System: A comparative capitalism perspective*, Palgrave Macmillan UK.

62. Dollar as the core of the International Monetary System. "The US emerged from the two world wars to become the economically and politically dominant core state. The US specialized in the production of the most advanced goods, which involves the use of the most sophisticated technologies and capital-intensive production. The postwar international monetary order, the dual-peg exchange rates or the gold exchange standard, placed the dollar as the single core currency of the international monetary system (...) Nevertheless, after the late 1960s the US no longer held a significant economic advantage over its major allies in the sphere of world production (...) After 1971, the Bretton Woods system was de facto replaced by a regime of freely floating fiat currencies that remains in place to the present day (...) The principal benefits the US enjoyed from the dollar's status as the dominant international currency were: the ability to run balance-of-payment deficits that others could not, the willingness of foreign official institutions to purchaseand hold US government bonds, and the related and crucial discretion of the Federal Reserve to implement expansionary monetary policy to stimulate a recessionary economy or inflate away debts (...) In this sense, the manufacturing disadvantages and the trade deficits of the US in the global economy were offset by the exorbitant privilege of the dollar in the post-Bretton Woods monetary order, which perpetuated the US's position as the core of the world economy (…) The dollar's core status in the international monetary system is the centerpiece of the US's core status in the international system."

63. **US-China symbiotic and asymmetric economic relations.** "… the US and China have formed a symbiotic relationship because of the dollar's core status in the international monetary system and China's excessive manufacturing capacity and dependence on foreign markets (…) China in the twenty-first century has been committed to export-oriented growth based on maintaining a low exchange rate (…) The result was the continuous expansion of China's foreign exchange reserves. China used part of these foreign reserves to purchase US Treasury bonds in order to finance American balance-of-payment deficits. On the one hand, China repressed its own domestic consumption and exported large quantities of inexpensive goods, which helped reduce US inflation and stimulate US consumption. On the other hand, China's massive purchase of US Treasury bonds helped lower their yields and bring down US interest rates, as another effort to secure the continuous increase of US demand for China's exports (…) It is estimated that about two-thirds of China's reserves are held in the form of dollar debt (…) The US and China have formed a symbiotic relationship in the capitalist world economy since the 1990s: the US consumes China's cheap exports, paying China in dollars, and China holds US dollars and bonds, in fact lending money to the US."

    "China, as a semi-periphery, is more vulnerable in the symbiotic relationship of its own making (…) Were China to dump its dollar reserves and destabilize the world economy, it would definitely hurt itself as well as the US. China would not only lose much the value of its reserves with the falling dollar, but would also jeopardize Americans' ability and willingness to continue to import Chinese goods, which would probably give rise to job loss and social instability in China. On the other hand, China's vulnerability can be seen in the enormous difficulties faced by its manufacturing exports after the global financial crisis (…) Therefore, it is more proper to describe the US–China economic relationship as symbiotic but asymmetric."

64. **Old and new Triffin dilemmas.** "Many economists and government officials have concluded that the unipolar, dollar-based monetary system is seriously flawed. Belgian-American economist Robert Triffin pointed out in the 1960s that an international monetary system based on the currency of one country cannot sustainably deliver both liquidity and confidence. More specifically, the continuous growth of the world economy demands a steady stream of dollars, which requires the US to run balance-of-payments deficits. However, excessive US deficits erode people's confidence in the dollar's value (convertible into gold at a fixed price). This inherent conflict between the dollar's role as the world's reserve currency and the declining confidence in the dollar in the postwar international monetary system is called the Triffin dilemma. Though the Triffin dilemma was directed against the Bretton Woods monetary system, it remains valid for today's international monetary system. The modern version posits that the massive amount of dollars created by the US authorities to satisfy world demand is inconsistent with people's confidence in the dollar's value (convertible into a fixed basket of US goods and services). Here arises the question of why the dollar remains the preeminent currency in the international monetary system despite the relative American economic decline and the obvious flaw of dollar hegemony. Eichengreen provides a simple but compelling answer: 'The dollar's dominance was supported by a lack of alternatives.'"

65. **Towards a multipolar currency system?** "Despite the rapid development of RMB internationalization, it is also worth noting that for the time being the inconvertibility of the RMB, as well as China's capital account control, both impose severe restrictions on the RMB's role as an international reserve currency. Therefore, the internationalization of the RMB is not expected to dethrone the dollar as the key international reserve currency in the foreseeable future (…) The growing roles of the euro and the RMB in the global economy indicate that the unipolar, dollar-based monetary system is evolving into a multipolar currency system that will exercise better discipline over the fiat currencies in the international monetary order."

66. **China's global role.** "… the Chinese leadership is thinking beyond the current world system to craft a post-Western world order in an incremental manner. With regard to the three competing hypotheses—the convergence hypothesis, the status quo hypothesis, and the challenge hypothesis—this paper lends no

direct support to any of them (...) It is not in China's interest to take extreme measures to destabilize or overthrow the existing world order; thus the radical challenge hypothesis is rejected. Moreover, the US-China economic relationship is asymmetric, which underlies the structural crisis of the world economy. It is argued that BW2 [the revived Bretton Woods system] is not sustainable in the long term; thus, the status quo hypothesis is also rejected. After the global economic crisis, the China leadership demonstrated its concerns with the existing international order, particularly the obvious flaw of a unipolar dollar-based monetary system. In this sense, the convergence hypothesis seems implausible. By anticipating the scenario that China could eventually shift to a more sustainable development model and push the internationalization of the RMB to reform the current international monetary system, one might conclude that China's policy response is more inclined to the challenge hypothesis. Even so, it is still more proper to describe China as a 'dissatisfied responsible great power.' China's incremental reforms in both domestic and international domains after the global crisis reveal that China as a rising power is no longer a rule-taker, accepting the status quo with regard to the current arrangement of international monetary order. Rather, China is better viewed as some combination of a rule-maker (promoting global reforms of existing arrangements) and a rule-breaker (in that it is creating its own arrangements)."

Wang, Zhaohui (2017): "The economic rise of China: Rule-taker, rule-maker, or rule-breaker?", Asian Survey 57(4), 595-617.

67. Attributes of an international reserve currency (Eichengreen, 2013)

A currency must possess three attributes to be international adopted in commercial and financial international transactions and held as reserve by central banks and governments.

- Scale: the country that issues the currency must conduct a sufficiently large amount of transactions with the rest of the world.
- Stability: the currency's users must believe that the value of the currency is sufficiently stable for the currency to perform well the functions of medium of exchange and deposit of value.
- Liquidity: financial assets denominated in the currency are available in sufficient quantities to be sold and bought, without the currency's value being significantly affected.

The country whose currency becomes internacionalized must develop an economy which is significantly open and integrated with the rest of the world (open capital account), a reputation for financial (economic, political) stability and liquid markets in dollar-denominated assets.

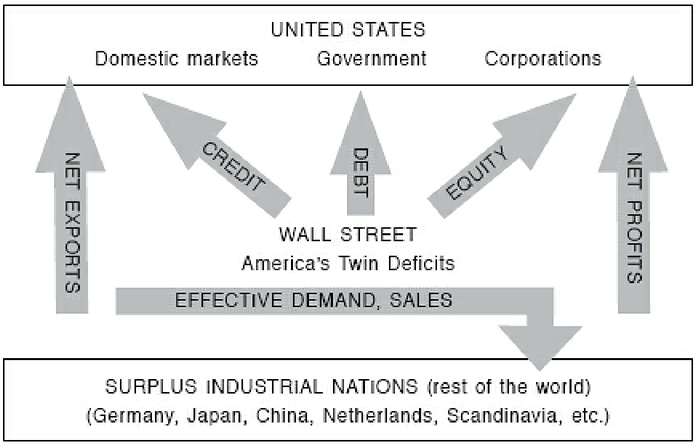
68. The status of the dollar

When the euro was created in 1999 some claimed that the euro would challenge the international status of the dollar (for instance the recipient of the Nobel Prize in economics Robert Mundell, 'the father of the euro'). Two decades after, this prediction does not appear to have materialized. The 2008 global financial crisis (and, specifically, the European debt crisis) has weakened the attractiveness of the euro as a global competitor to the dollar. The status of the dollar itself has been damaged by the global financial crisis: the confidence in the dollar as an international currency has been negatively affected by the unorthodox fiscal and monetary measures adopted in the US to combat the financial and economic effects of the crisis. These events have pointed to the renminbi as possible replacement of the dollar as a leading international currency. Chey (2013) contends that this replacement is unlikely in the medium run: politically and economically China is not yet an internationally strong power. What appears more likely is the emergence of the renminbi as an Asian regional currency.

Hyoung-kyu Chey (2013): "Can the renminbi rise as a global currency? The political economy of currency internationalization," *Asian Survey* 53(2), 348-368.

Cohen, Benjamin J. (2011): *The future of global currency: The euro versus the dollar*, Routledge, London and New York.

Eichengreen, Barry (2011): *Exorbitant privilege: The rise and fall of the dollar and the future of the International Monetary System*, Oxford University Press, New York.



69. Varoufakis's global minotaur hypothesis. "I might have called this book The Global Vacuum Cleaner, a term that captures quite well the main feature of the second post-war phase that began in 1971 with an audacious strategic decision by the US authorities: instead of reducing the twin deficits that had been building up in the late 1960s (the budget deficit of the US government and the trade deficit of the American economy), America's top policy makers decided to increase both deficits liberally and intentionally. And who would pay for the red ink? Simple: the rest of the world! How? By means of a permanent tsunami of capital that rushed ceaselessly across the two great oceans to finance America's twin deficits. The twin deficits of the US economy thus operated for decades like a giant vacuum cleaner, absorbing other people's surplus goods and capital (…) it did give rise to something resembling global balance: an international system of rapidly accelerating asymmetrical financial and trade flows capable of creating a semblance of stability and steady growth. Powered by America's twin deficits, the world's leading surplus economies (e.g. Germany, Japan and, later, China) kept churning out goods that Americans gobbled up. Almost 70 per cent of the profits made globally by these countries were then transferred back to the United States, in the form of capital flows to Wall Street. And what did Wall Street do with them? It instantly turned these capital inflows into direct investments, shares, new financial instruments, new and old forms of loans and, last but not least, a 'nice little earner' for the bankers themselves. Through this prism, everything seems to make more sense: the rise of financialization, the triumph of greed, the retreat of regulators, the domination of the Anglo-Celtic growth model (…) The role of the beast was played by America's twin deficits, and the tribute took the form of incoming goods and capital."

"Central to this global surplus recycling mechanism (GSRM), which I have likened to a Global Minotaur, were the two gargantuan deficits of the United States: the *trade deficit* and the federal government *budget deficit*. Without them, the book argues, the global circular flow of goods and capital (see diagram below) would not have 'closed', destabilizing the global economy. This recycling system broke down because Wall Street took advantage of its central position in it to build colossal pyramids of private money on the back of the net profits flowing into the United States from the rest of the world. The process of *private money* minting by Wall Street's banks, also known as *financialisation*, added much energy to the recycling scheme, as it oozed oodles of new financial vitality, thus fuelling an ever-accelerating level of demand within the United States, in Europe (whose banks soon jumped onto the private money-minting bandwagon) and Asia. Alas, it also brought about its demise."

"In conclusion, a crystal clear picture is emerging: the Crisis did not alter the deficit position of the United States. The federal budget deficit more or less doubled while America's trade deficit, after an initial fall, stabilised at the same level. *However, the US deficits are no longer capable of maintaining the mechanism that keeps the global flows of goods and profits balanced at a planetary level.* Whereas until 2008 America was able to draw into the country mountains of net imports of goods, and a similar volume of capital flows (so that the two balanced out), this is no longer happening post-2008. American markets are sucking 24 per cent fewer net imports (thus generating only 66 per cent of the demand that the rest of the world was used to before the Crash) and are attracting into the American private sector 57% less capital than they would have had Wall Street not collapsed in 2008.

In short, of the mighty Global Minotaur, the only reminder that remains is the still accelerating flow of foreign capital into America's public debt (…), evidence that the world is in disarray and money is desperately seeking safe haven in the bosom of the reserve currency in this age of tumult. But as long as the Rest of the World is reducing its injection of capital into America's corporate sector and real estate, while America is reducing its imports of their net exports, we can be certain that the beast is dead and nothing has taken its place with a capacity to re-start the essential process of surplus recycling."

"*Europe is disintegrating because its architecture was simply not sound enough to sustain the shockwaves caused by our Minotaur's death throes* (…) For two years now, the German public has become convinced that Germany has escaped the worst of the Crisis because of the German people's virtuous embracing of thriftiness and hard work; in contrast to the spendthrift Southerners, who, like the fickle grasshopper, made no provision for when the winds of finance would turn cold and nasty. This mindset goes hand in hand with a moral righteousness which implants into good people's hearts and minds a penchant for exacting punishment on the grasshoppers – even if punishing them also punishes themselves (to some extent). It also goes hand in hand with a radical misunderstanding of what kept the eurozone healthy and Germany in surplus prior to 2008: that is, the Global Minotaur whose demand-generation antics were for decades allowing countries like Germany and the Netherlands to remain net exporters of capital and consumer goods within and without the eurozone (while importing US-sourced demand for their goods from the eurozone's periphery). Interestingly, one of the great secrets of the post-2008 period is that the Minotaur's death adversely affected aggregate demand in the eurozone's surplus countries (Germany, the Netherlands, Austria and Finland) *more* than it did the deficit member states (like Italy, Spain, Ireland, Portugal and Greece)."

"To recap, the Minotaur's surplus recycling was essential to the maintenance of the eurozone's faulty edifice. Once it vanished from the scene, the European common currency area would either be redesigned or it would enter a long, painful period of disintegration. An unwillingness by the surplus countries to accept that, in the post-Minotaur world, some other form of surplus recycling is necessary (and that some of their own surpluses must also be subject to such recycling) is the reason why Europe is looking like a case of alchemy-in-reverse: for whereas the alchemist strove to turn lead into gold, Europe's reverse alchemists began with gold (an integration project that was the pride of its elites) but will soon end up with the institutional equivalent of lead."

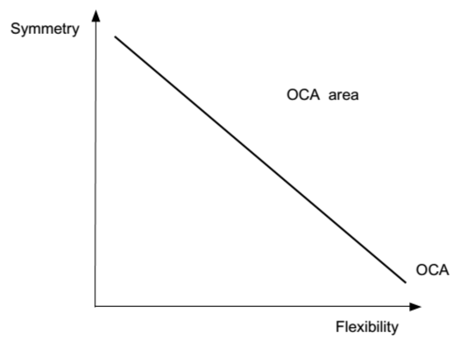
Varoufakis, Yanis (2015): *The global minotaur: America, Europe and the future of the global economy*, Zed Books.

IV. INTEGRACIÓ

70. Economic integration. "In general, this integration may take five main forms, which (in order of increasing degree of integration) are: 1) A preferential trading club, which is an agreement between two or more countries to reduce tariffs and other restrictions on imports from one to the other; each member, however, retains complete freedom to impose different tariffs and other restrictions on imports from non-member countries. 2) A free-trade area (or association), in which the partner countries abolish tariffs and other restrictions on imports from one to the other, while retaining complete freedom over their commercial policies towards the rest of the world. 3) A customs union, which, in addition to the provisions of the free-trade area, establishes a common external tariff schedule on all imports from non-member countries. 4) A common market, in which the countries, in addition to the provisions of the customs union, allow free movement of all factors of production among themselves. 5) An economic union, in which the partner countries, in addition to the provisions of the common market, proceed to unify their economic policies."

Gandolfo, Giancarlo (1987): *International economics I*, Springer.

71. Conditions to make a monetary union. "The conditions that are needed to make a monetary union among candidate Member States attractive can be summarized by three concepts: Symmetry (of shocks); Flexibility; Integration. Countries in a monetary union should experience macroeconomic shocks that are sufficiently correlated with those experienced in the rest of the union (*symmetry*). These countries should have sufficient *flexibility* in the labour markets to be able to adjust to asymmetric shocks once they are in the union. Finally they should have a sufficient degree of trade *integration* with the members of the union so as to generate benefits of using the same currency."



"Figure 1 presents the minimal combinations of symmetry and flexibility that are needed to form an optimal currency area by the downward-sloping OCA line. Points on the OCA line define combinations of symmetry and flexibility for which the costs and the benefits of a monetary union just balance. It is negatively sloped because a declining degree of symmetry (which raises the costs) necessitates an increasing flexibility. To the right of the OCA line, the degree of flexibility is sufficiently large given the degree of symmetry to ensure that the benefits of the union exceed the costs. To the left of the OCA line, there is insufficient flexibility for any given level of symmetry.

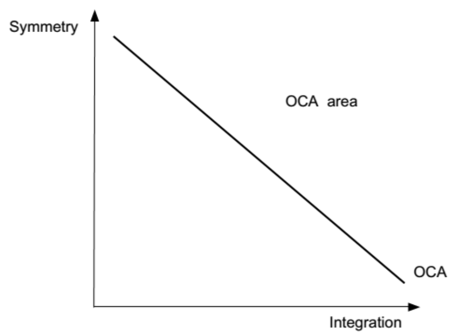


Figure 2 presents the minimal combinations ofsymmetry and integration that are needed to form an optimal currency area. The OCA line represents the combinations of symmetry and integration among groups of countries for which the cost and benefits of a monetary union just balance. It is downward sloping for the following reason. A decline in symmetry raises the costs of a monetary union. These costs are mainly macroeconomic in nature. Integration is a source of benefits of a monetary union, i.e., the greater the degree of integration the more the member countries benefit from the efficiency gains of a monetary union. Thus, the additional (macroeconomic) costs produced by less symmetry can be compensated by the additional (microeconomic) benefits produced by more integration. Points to the right of the OCA line represent groupings of countries for which the benefits of a monetary union exceed its costs.

The presumption of many economists at the end of the 1980s was that the EU countries should be located to the left of the OCA lines in Figures 1 and 2, i.e., given the degree of integration achieved in the EU there was still too much asymmetry and too little flexibility for the EU to form a monetary union whose benefits would exceed the costs."

72. **Monetary union theories: Mundell I and Mundell II.** "Mundell I is the traditional theory of optimal currency areas (OCA) pioneered by Mundell (1961) in the early 1960s and further elaborated by McKinnon (1963), Kenen (1969) and others. The OCA theory determines the conditions that countries should satisfy to make a monetary union attractive, i.e. to ensure that the benefits of the monetary union exceed its costs. This theory has been used most often to analyse whether countries should join a monetary union. It can also be used to study the conditions in which existing members of a monetary union will want to leave the union."

    "In the world of Mundell II joining a monetary union should not be seen as a cost arising from the loss of the exchange rate as an adjustment mechanism, but as a benefit of eliminating a source of asymmetric shocks. For most countries, the exchange rate does not provide a degree of freedom but uses up a degree of freedom in their economic policy since they have to stabilize this asset price (…) The view expressed by Mundell II is based on the idea that foreign exchange markets are not efficient and should not be trusted to guide countries towards macroeconomic equilibrium. There is a second insight in Mundell II. This is that only in a monetary union can capital markets be fully integrated so that they can be used as an insurance mechanism against asymmetric shocks (…). When countries remain outside a monetary union they cannot hope to profit from insurance against asymmetric shocks provided by capital markets in the rest of the world. The reason is that the large and variable exchange risk premia prevent these capital markets from providing insurance against asymmetric shocks. Thus the world of Mundell II is one in which countries that stay outside a monetary union will have to deal with large asymmetric shocks that arise from the instability of international capital flows. In addition, these countries' ability to insure against traditional asymmetric shocks is severely restricted when they stay outside a monetary union. With such an analysis it should not be surprising that Mundell II became a major promoter of monetary union in large parts of the world, and in particular in Europe."

De Grauwe, Paul (2006): "What have we learnt about monetary integration since the Maastricht Treaty?", Journal of Common Market Studies 44(4), 711-730.

73. **Economic integration and political disintegration.** "In a world of trade restrictions, large countries enjoy economic benefits, because political boundaries determine the size of the market. Under free trade and global markets even relatively small cultural, linguistic or ethnic groups can benefit from forming small, homogeneous political jurisdictions. This paper provides a formal model of the relationship between openness and the equilibrium number and size of countries, and successfully tests two implications of the model. Firstly, the economic benefits of country size are mediated by the degree of openness to trade. Secondly, the history of nation-state creations and secessions is influenced by the trade regime."

Alberto Alesina, Enrico Spolaore, Romain Wacziarg (2000): "Economic integration and political disintegration", American Economic Review 90(5), 1276-1296.

Ronald W. Jones, Sugata Marjit (2001): "The role of international fragmentation in the development process", American Economic Review 91(2), 363-366

74. **European integration.** "The issue of European integration was framed by theoretical analyses most of which were undertaken as part of the orthodoxy of Optimum Currency Areas. The traditional OCA theory holds that in a monetary union of countries which meet certain criteria, namely a minimum level of convergence, less developed economies are expanding faster than developed ones. As a result, there is convergence of the levels of per capita income with the one of developed economies, namely real convergence. The arguments of this theory received strong criticism, thus giving rise to the endogenous OCA theory, according to which these criteria can be met ex post."

"Convergence, according to the endogenous growth theory is not the norm but the exception. Yet in particular these authors support that trade integration can possibly lead to an increase in the specialization of each country (…) and consequently to greater sensitivity towards a shock in the industrial sector, leading to more asymmetric business cycles (…) They also conclude that the creation of the EMU is easily justified ex-post. This conclusion is also supported by the argument of the endogenous nature of financial integration (…) The overall conclusion is that the monetary union can strengthen trade integration and the synchronization of business cycles. Thus according to the theory of endogeneity, a process of structural transformations renders the member states more capable of satisfying the criteria of optimization ex-post."

"The anticipated benefits from the creation of an OCA, which must outbalance the relative cost, concern the reinforcement of internal and external equilibria and must facilitate the response to shocks. The main benefits include the elimination of the uncertainty involved in the exchange rate fluctuations – as trade between the members of the OCA and specialization are reinforced and scale economies are created – and the elimination of transaction costs and exchange rate risks."

"… the abandonment of Keynesian principles and the adoption of the monetarist Maastricht criteria (…) gave rise to strong concerns about the sustainability of the EMU. Ignoring the heterogeneity of member states of the union and imposing uniform rules of economic policy (…) created internal and external imbalances in the member states. These imbalances were reinforced by the global financial and economic crisis both within the EMU, and in the majority of the new EU members, creating debt crises and sovereign default risks. The European institutions have not provided an effective collective solution to the problem of the debt crisis. It was this gap that, within the framework of globalization, allowed dependence of problematic EU countries on international financial markets on high cost."

Makris, Georgios (2015): "Optimum currency area theory, nominal and real convergence controversies and the European experience after the recent global economic crisis", in Karasavvoglou, Anastasios; Ongan, Serdar; Polychronidou, Persefo; eds.: *EU crisis and the role of the periphery*, Springer.

Grubel, Herbert (2006): "The economics of monetary unions: Traditional and new", in *Regional Economic Integration: Research in Global Strategic Management, Volume 12*, pp. 55–75

75. EMU. "The most distinctive feature of the European Monetary Union (EMU) is its uniqueness. It is impossible to find a single case since the beginning of the Industrial Revolution where a number of independent, sovereign states have created a *complete* monetary union with a common currency, central bank, monetary and exchange rate policies without first establishing a *political* union! (…) A political union becomes essential, therefore, if the constituent countries/regions are to be able: (a) to share similar values and goals; and (b) to mobilize their resources for the provision of public goods that benefit the whole union. It is also needed for creating the common institutions without which it is virtually impossible to pursue with consistency the objectives and policies that, by keeping regional and personal inequalities within socially acceptable limits, make it possible for the whole union to work towards the same goals without coercion (…) The greatest danger confronting the EMU in its present form is that economic stagnation in member countries, and the restrictions imposed on the ability of national governments to prevent it, are raising serious doubts about its long-term viability. Inflation apart, the European Central Bank shows little sensitivity to the economic problems of member countries (…) Economic and social inequalities within the eurozone are greater than in any of its member states. What is more, they are increasing (…) For the socio-economic benefits of such a union to outweigh the costs, it is imperative for the countries to create an institutional framework that ensures long-term improvement (…) in the economic security and welfare of *all* member states."

Panić, Milivoje (2011): *Globalization: A threat to international cooperation and peace?*, Palgrave Macmillan.

76. EMU flaws. "The present governance of the euro area has been devised assuming that the world fits the monetarist-real-business-cycle theory. But that theory is not a correct representation of the world. The

European monetary union is a remarkable achievement, but remains fragile because of the absence of a sufficient degree of political union."

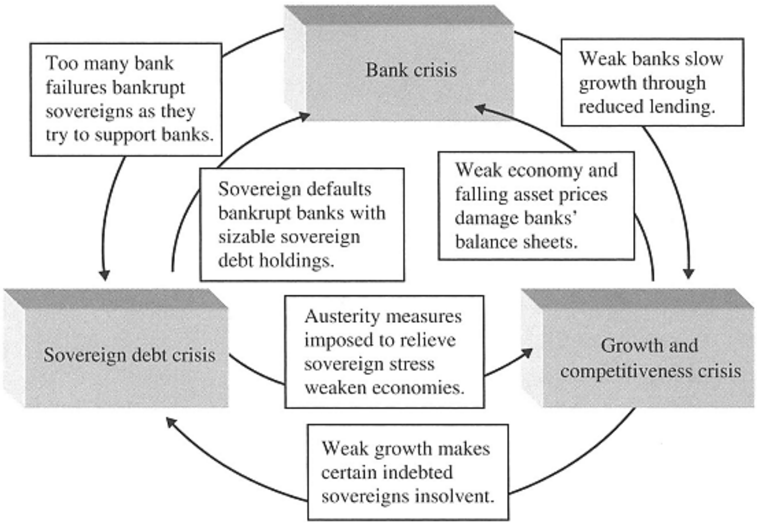
"A first idea which may have helped to convince the critics of monetary union is that, even if the euro area countries do not yet satisfy the OCA criteria, they will in the future as the monetary union sets in motion a process of more intense integration. This good-news-theory suggests that the euro area may be moving safely into the OCA area by the very fact that the euro area was started."

"The European monetary union is a remarkable achievement. Yet it also remains fragile because of a flaw in its governance. This is the absence of a sufficient degree of political union which includes a central European government with the power to spend and to tax, and which is independent of national governments. Such a government is necessary to complement the macroeconomic management of the euro area which is now entrusted exclusively to the ECB. In addition, a central European government is the only institution that can fully back the ECB."

"Finally, the absence of a minimal degree of budgetary integration that can form the basis of an insurance mechanism is another flaw in the design of European monetary union. (...) It is difficult to conceive how a union can be politically sustainable if each time a country of the union gets into trouble because of asymmetric developments, it is told by the other members that it is entirely its own fault and that it should not count on any help. Such a union will not last."

77. The euro's three crises

In 2012 the eurozone faced three interdependent crises that challenged the euro's viability. (i) Banks had liquidity problems (banking crisis). (ii) Governments had funding problems, with yields on government bonds sky-rocketing (sovereign debt crisis). (iii) Economic activity slowed down (growth crisis). The euro implied that severe economic problems can no longer be contained within the countries initially experiencing the problems, as now these problems easily cross national borders.



Shambaugh, Jay C. (2012): "The euro's three crises", Brookings Papers on Economic Activity, Spring, 157-211.

78. EU crisis: a constitutional culture trilemma. "There are three paths to constitutionalism in the modern world. Under the first, revolutionary outsiders use the constitution to commit their new regime to the principles proclaimed during their previous struggle. India, South Africa, Italy and France have followed this path. Under the second, establishment insiders use the constitution to make strategic concessions to disrupt revolutionary movements before they can gain power. Britain provides paradigmatic examples. Under the third, ordinary citizens remain passive while political and social elites construct a new constitution. Spain, Japan and Germany provide variations on this theme. Different paths generate different legitimation problems, but the EU confronts a special difficulty. Since its members emerge out of three divergent pathways, they disagree about the nature of the union's constitutional problem, not merely its solution. Thus the EU confronts a cultural, not merely an economic, crisis."

Ackerman, Bruce (2015): "Three paths to constitutionalism – and the crisis of the European Union", British Journal of Political Science 45(4), 705-714.

While there are many factors contributing to Europe's travails, there is one underlying *mistake*: the creation of the single currency, the euro. Or, more precisely, the creation of a single currency without creating a set of institutions that enabled a region of Europe's diversity to function effectively with a single currency.

The eurozone was flawed at birth. The structure of the eurozone—the rules, regulations, and institutions that govern it—is to blame for the poor performance of the region, including its multiple crises. The diversity of Europe had been its strength. But for a single currency to work over a region with enormous *economic and political* diversity is not easy. A single currency entails a *fixed* exchange rate among the countries and a single interest rate. Even if these are set to reflect the circumstances in the majority of member countries, given the economic diversity, there needs to be an array of institutions that can help those nations for which the policies are not well suited. Europe failed to create these institutions.

There is a large economic literature asking, what is required for a group of countries to share a common currency and have shared prosperity?[22] There was consensus among economists that for the single currency to work, what was required is that there be *sufficient* similarity among the countries.

So much importance was assigned to these fiscal concerns that they came to be called the *convergence criteria.* But the way the euro was designed led to *divergence*: when some country had an adverse "shock," stronger countries gained at the expense of the weaker. The fiscal constraints imposed as part of the convergence criteria—limits on deficits and debt relative to GDP—themselves contributed to divergence.[20]

The adverse effects of a eurozone structure almost inevitably leading to divergence have been compounded by the *policies* that the eurozone has chosen to follow, especially in response to the euro crisis. Even within the strictures of the eurozone, alternative policies could have been pursued. That they were not is no surprise: a central theme of this book is that the same mindset that led to a flawed structure led to flawed policies.

Stiglitz, Joseph E. (2016): *The euro: How a common currency threatens the future of Europe*, W. W. Norton.

79. Achievements and weaknesses of the European monetary union

Trichet (2013) argues that European prosperity and influence depends on setting the correct path of European integration, both economic and political. Europe's EMU is itself viewed as a historically unique achievement: "a 'society of states' of a completely new type." He lists successes of the EMU: price stability and stable expectations on the value of the euro (future price stability), with these results attained in the presence of important global oil and commodity shocks and not at the expense of sacrificing employment creation. He also lists several EMU economic governance weaknesses. In particular:

- "the Stability and Growth Pact designed to ensure sound fiscal policies in the Euro area has not been correctly implemented."
- "at the start, the governance of the Euro area did not comprehend any serious monitoring and surveillance of competitiveness indicators, of nominal evolutions of prices and costs in any particular nation and of national external imbalances within the Euro area."
- The lack of an effective banking union (given the high correlation between the creditworthiness of a state and its banks).
- Neglect in the implementation of crisis management tools when the euro was created.
- Market integration (particularly, in services) has not been fully achieved.
- "The slow and hesitant implementation of the structural reforms foreseen in the Lisbon agenda and in the 2020 program."

Trichet, Jean-Claude (2013): "International policy coordination in the Euro area: Toward an economic and fiscal federation by exception," Journal of Policy Modeling 35, 473-481.

80. Trichet's (2013) economic and fiscal federation proposal

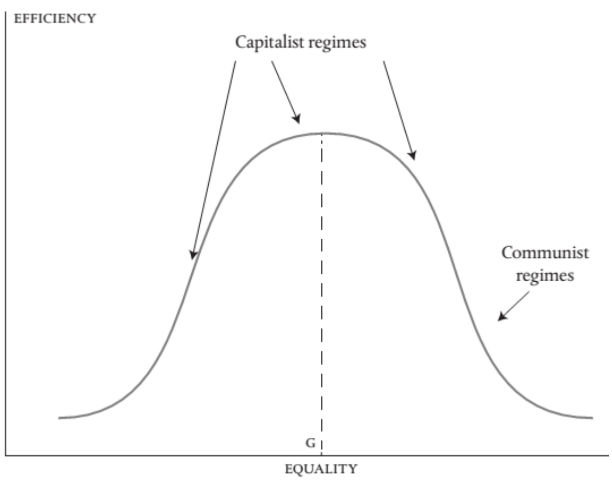
The current system (the Macroeconomic Imbalance Procedure) is one of 'fines' (a percentage of GDP) for countries whose improper conduct (materialized in excessive macroeconomic imbalances) puts at risk the stability of the EMU. Since such fines have not proved effective to deter countries in undesirable behaviour, Trichet suggests replacing this system with a new decision making process he calls 'the activation of an economic and fiscal federation by exception', in which fiscal sovereignty can be limited in exceptional cases by a majority vote of the members of the European Parliament from Euro area states.

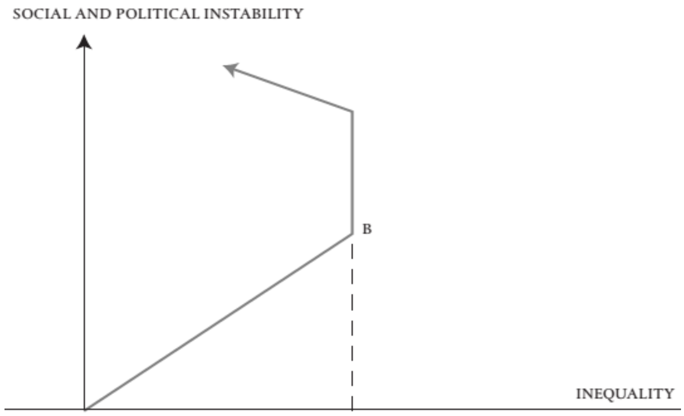
- "The scope of interventions and the measures taken by the federal institutions would so rely, even in the much longer term, on the principle 'as little as possible in normal times, but as much as necessary in exceptional times'." It appears that the ECB applied this principle during the Euro area debt crisis (July 2012: Draghi's 'whatever it takes' speech).
- Trichet also proposes the setting up of a Ministry of Finance of the Euro area. "This ministry would have the responsibility of the activation of the economic and fiscal federation when and where necessary. It would be responsible for the handling of the crisis management tools like the ESM [European Stability Mechanism]. It would also be responsible for the handling of the banking union, within the limits of the executive branch responsibility. And it would represent the Euro area in international institutions and informal groupings."

Trichet, Jean-Claude (2011): "Tomorrow and the day after tomorrow: A vision of Europe," Humboldt University, Berlin.

"People only accept change when they are faced with necessity, and only recognize necessity when a crisis is upon them." Jean Monnet

81. Government vs market





de Grauwe, Paul (2017): *The limits of the market: The pendulum between government and market*, Oxford University Press, Oxford, UK.

82. Explaining the divergence in the economic performance of EMU members

There is a big divide in the EMU between two groups of countries. One group is led by Germany and includes those countries (clearly, Netherlands, Austria, Belgium; less enthusiastically, France) that, since the early 1980s, have reorganized their macroeconomic institutions to match the performance of the German economy (by pegging their currencies to the Deutsche Mark and keep unit labour controls under control or facilitate their falling).

The second group is given by those who tried later to attain exchange rate stability by linking their currencies to the Deutsche Mark and, in general, adapted their instutional macroeconomic framework as a means to satisfy the Maastricth Treaty criteria to join the EMU (clearly, Portugal, Italy and Greece; also, Ireland and Spain). For the latter group, the initial drop in labour costs in the 1990s to get read for the EMU was replaced by a continuous increase in the 2000s after the adoption of the euro. The fiscal crisis of 2009-10 culminated that evolution.

- An explanation of the divergence is given by the (so-called) irresponsible fiscal policies, and the fiscal mismanagement, that resulted from the attempt to compensate through fiscal activism the loss of monetary policy independence. Before the 2008 financial crisis, the interest rate differentials between the debts of the two groups were very small. That allowed the members of the second group to run up large volumes of public debt. This created fiscal imbalances that make those countries strongly vulnerable under the extraordinary conditions of the global financial crisis. The perception of that vulnerability made the fiscal position of those countries untenable and led to the European debt crisis.
- A second explanation involves labour market regulations. When the fundamental policy tools (monetary, fiscal and exchange rate policies) cannot be freely used, as occurs in the EMU, other institutions and variables should be 'more flexible' (and that usually is supposed to mean the labour markets and wages). Lack of sufficient 'labour flexibility' in the members of the second group of countries makes the underlying macroeconomic problems and imabalances more serious. This argument seems to forget that the labour markets of the states in the first group are equally inflexible, as they have strong labour unions and their wage-setting systems are relatively rigid (but now the expression used is 'highly organized').
- A third explanation (applied mostly to Spain and Ireland) have more to do with speculative manias and financial considerations: asset price inflation and bursting bubbles. Low interest rates fuelled an asset and construction boom through cheap mortgages and rising housing prices.
- A fourth one revolves around poor financial regulation (that attracted risky capital).
- A fifth explanation blames EMU itself, as some troubles made apparent by the euro crisis (such as massive current account divergences) correlate well with the start of EMU.

Bob Hancké (2013): Unions, central banks, and EMU: Labour market institutions and monetary integration, Oxford University Press, Oxford, UK.

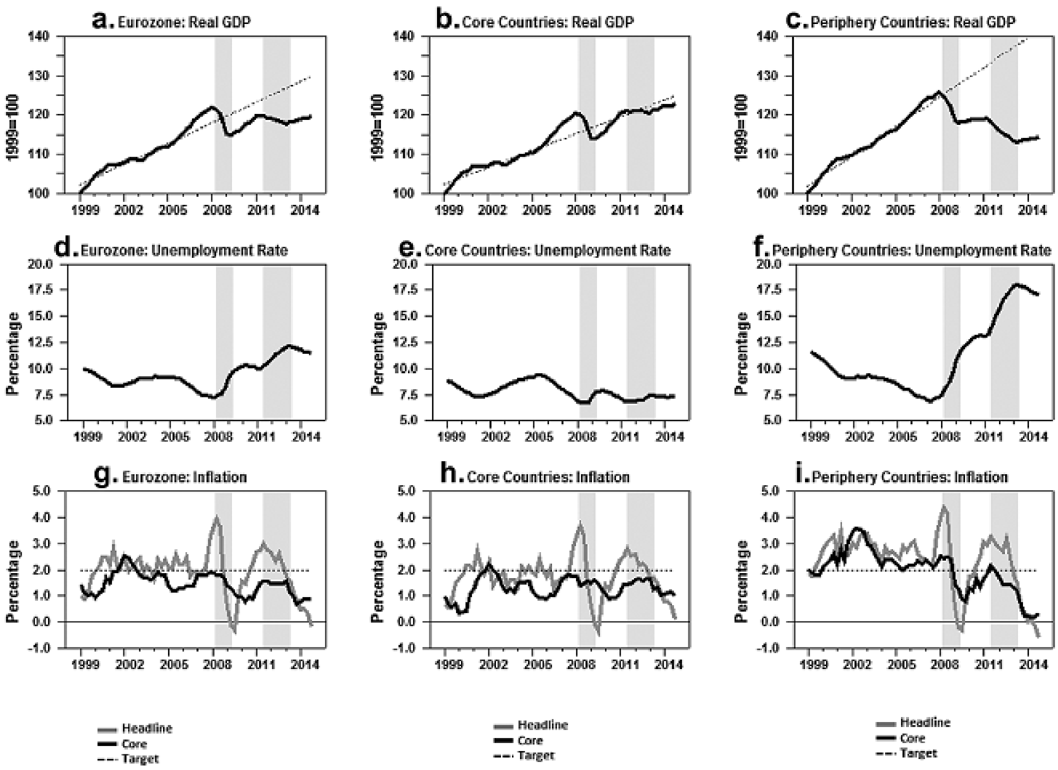
Richard Peet (2009): *Unholy trinity: The IMF, World Bank and WTO.*

83. **The Schuman Declaration (9 May 1950).** "Europe will not be made all at once, or according to a single plan. It will be built through concrete achievements which first create a de facto solidarity. The coming together of the nations of Europe requires the elimination of the age-old opposition of France and Germany. Any action taken must in the first place concern these two countries. With this aim in view, the French Government proposes that action be taken immediately on one limited but decisive point. It proposes that Franco-German production of coal and steel as a whole be placed under a common High Authority, within the framework of an organization open to the participation of the other countries of Europe. The pooling of coal and steel production should immediately provide for the setting up of common foundations for economic development as a first step in the federation of Europe, and will change the destinies of those regions which have long been devoted to the manufacture of munitions of war, of which they have been the most constant victims. The solidarity in production thus established will make it plain that any war between France and Germany becomes not merely unthinkable, but materially impossible."

84. **Eurozone crisis.** "The eurozone crisis represents one of the greatest economic tragedies of the past century. It has caused immense human suffering, which continues to this day. The standard view attributes the economic crisis to an earlier buildup of public and private debt that was augmented by the imposition of austerity during the crisis. Although evidence exists of a relationship between the debt buildup, austerity measures, and economic growth during the crisis, that same evidence, on closer examination, points to

eurozone countries' common monetary policy as the real culprit behind the area's sharp decline in economic activity. In particular, it seems that the European Central Bank's tightening of monetary policy in 2008 and again in 2010-2011 not only caused two recessions but also sparked the sovereign debt crisis and gave teeth to the austerity programs. Such findings point to the need for a new monetary policy regime in the eurozone. The case is made for the new regime to be a targeted growth path for total money spending."

Beckworth, David (2017): "The monetary policy origins of the eurozone crisis", International Finance 20, 114-134



Gray bars = GDP recession

core countries = Austria, Belgium, Finland, France, Germany, and the Netherlands;

periphery countries = Greece, Ireland, Italy, Portugal, and Spain

85. EMU reforms and sovereign debt. "A missing element in the architecture of the euro area is a mechanism for an orderly restructuring of unsustainable sovereign debt. Clear rules for creditor participation in case of overindebtedness would strengthen market discipline and enhance the effectiveness of crisis assistance. We propose a novel two-stage mechanism that allows for postponing the crucial distinction between liquidity and solvency crises and is part of the assistance provided by the European Stability Mechanism (ESM). At the onset of a programme, the framework includes an immediate maturity extension if the debt burden is high. If post-crisis debt turns out to be unsustainable, the debtor country can negotiate a deeper debt restructuring. In addition, we introduce a gradual transition phase into the new regime. As current debt matures, it is replaced by a new class of bonds with Creditor Participation Clauses (CPC), which are subject to the new rules as mentioned above."

"The recent reforms of the architecture of the European Monetary Union (EMU) build on the premise that national governments are responsible for fiscal policy. In order to help member states to control their indebtedness, the Stability and Growth Pact (SGP) was reformed and additional fiscal rules were introduced. The European Semester and national fiscal councils were established. With the creation of the European Stability Mechanism (ESM), an important element of a crisis mechanism became part of EMU architecture. However, the existing crisis mechanism lacks a framework for debt restructuring to constitute a safeguard against moral hazard and to handle cases of unsustainable public debt."

Jochen Andritzky, Désirée I. Christofzik, Lars P. Feld, Uwe Scheuering (2018): "A mechanism to regulate sovereign debt restructuring in the euro area", International Finance 1–15.

Colin Krainin (2016): “Preventive war as a result of long-term shifts in power”, Political Science Research and Methods, available on CJO 2015 doi:10.1017/psrm.2015.35

86. **Optimum currency area puzzle.** “The theory of optimum currency areas, suggesting the redrawing of currency areas across countries or splitting of national money into several currencies, is at odds with the one-money-one-country pattern that has dominated monetary history for 26 centuries. This paper puts forward an equilibrium approach which, by stressing the influence of the border effect on intranational adjustment, solves the puzzle and analyzes the closely related issue of the viability of monetary unions and regional specialization (…) In a world of continuous change, tailoring currency areas to one inbuilt characteristic, as the received view prescribes, would at best answer just one type of imbalance. Likewise, redesigning currency areas in order to avoid asymmetric shocks would not do because the adjustment problem would emerge again in the new setting: under ever-mutating circumstances, a once-and-for-all policy is illusory.”

“When we look at the factors that actually determinate the domains of different monies, we find that they are not the economic considerations suggested by the theory of optimum currency areas, as first discussed by Mundell, Kenen, and McKinnon 30 years ago. They are, rather, political. In particular, virtually all of the world’s nations assert and express their sovereign authority by maintaining a distinct national money and protecting its use within their respective jurisdictions. Money is like a flag; each country has to have its own.” (Michael Mussa 1995)

Cesarano, Filippo (2013): “The optimum currency area puzzle”, Int Adv Econ Res DOI 10.1007/s11294-013-9404-5.

Mussa, Michael (1995): “One money for how many?” In P. B. Kenen; ed.: *Understanding interdependence: The macroeconomics of the open economy*, Princeton University Press, pp. 98-104.

Obstfeld, Maurice; Rogoff, K. (2001): “The six major puzzles in international macroeconomics: Is there a common cause?”, In B. S. Bernanke; K. Rogoff; eds.: *NBER Macroeconomics Annual 2000*, volume 15, MIT Press, pp. 339-412.

V. QÜESTIONS I REFLEXIONS

1. The US economy is at the centre of the global economy as the dominant player.

- US dominance was apparently achieved after two world wars (emergence of the dollar as a global currency after the First World War; international emergence of the US industrial, trading and investment power after the Second World War).
- The Bretton Woods system institutionalized this dominance.
- Has the US made abusive use of its global dominance and caused global imbalances?
- Was the collapse of the Bretton Woods systems the outcome of US abuse (its 'exorbitant privilege') or simply died as a result of its own success?
- Is the financial globalization that accelerated in the 1980s the consequence of the US to redefine its dominance (from global industrial to global financial power)?

2. Do prosperous economic regional blocks must necessarily be organized hierarchically?

- Is there an intrinsic limitation to the hierarchical organization of the global economy?
- Triffin dilemma and generalized Triffin dilemmas: a tension between the stability of the international monetary/financial system and its usefulness as an instrument for economic development.
- The global economy appears to be organized in a centre (developed economies) and a periphery (the rest). The same basic two-tier structure seems also to apply to regional economic blocks (in the European Union there is also a centre, the northern and Scandinavian economies, and a periphery, eastern and southern economies). Must this be necessarily so for these economies to develop/expand?
- The dominant global economic power appears to be led to run current account deficits. Dominant regional economic powers appear to require running current account surpluses (Germany, Japan, China). Could the US economically behave like Germany?

3. Must successful challengers to US dominance be global military powers?

- Japan: failed to replace the US in the 1980s
- Like Japan, Germany became after World War II an economic (industrial, export-led) power that lacked global military power/influence. The US could accept the full integration of the two economies in the global system the US created because, in the last instance, they could not pose a threat to US dominance.
- European Union: introduction of the euro has not been sufficient to displace US financial dominance (the European Union is politically a weak entity).
- Russia: serious military contender whose economy eventually failed.
- Is China the only real, serious challenger to US global supremacy, economic, political and military?

4. Conditions for global economic/financial dominance

- The centre of an international monetary system must provide: (i) a liquid and safe asset; (ii) in sufficient amount; and (iii) with a satisfactory return (to be a global and stable store of value).
- An international reserve currency must meet properties of scale (large number of transactions), liquidity and stability.
- The economy is better suited to provide a global economic currency if it has (i) large population, (ii) has economic success (develops the potential for economic expansion associated with a large population) and (iii) is sufficiently integrated with the rest of the world.

5. Globalization is a political project

- Two views of this project: the Washington Consensus (the view from the West); the Beijing Consensus (the view from the Rest).
- At the global level, political decisions determine economic outcomes: global markets are not, and cannot be, 'free'.
- The global currency, also acting as an international reserve currency, expresses political (and military) global dominance.

6. Constraints globalization imposes on domestic economies

- A monetary constraint: the open economy trilemma (tension between exchange rate stability, monetary stability and financial globalization).
- A general constraint: Rodrik's trilemma (after Dani Rodrik: tension between domestic economic policy, democracy and globalization).
- A monetary union constraint: the monetary union trilemma (tension between fiscal policy flexibility, financial stability and free capital mobility).
- The great trilemma: can sovereignty (a sovereign state system), democracy (democratic governments) and globalization (integrated global marketplace) coexist?
- Do TARGET2 balances describe an eurozone imbalance between northern and southern European economies? Are the southern countries (like the US) caught in a deficit trap?
- Debt-led vs export-led growth
- Does globalization increase or decrease economic inequality?

7. What occurs in a state system without a dominant player (or with one not willing to be dominant)?

- Global/international cooperation and coordination appear historically (i) to be rare and episodic and (ii) to occur in situations of crisis.
- Does competition among states improve economic policy?
- Does globalization and interdependece make international cooperation more desirable?
- How important is free riding for international economic policy? Without institutions of global governance, how can international agreements be enforced?
- The troubles of the eurozone: bad institutional architecture?

8. Dimensions of global instability

- **Sources of financial instability**

  (i) Global shadow banking. (ii) International dimension of Hyman Minsky's financial instability hypothesis. (iii) Insufficient or weak global finantial institutions. (iv) Lack of global finantial regulation. (v) Excessive privileges of the US economy and the dollar: the US is the centre of financial flows and US monetary policy diverts international financial flows. (vi) Triffin dilemma: stability vs liquidity.

- **Sources of economic instability**

  (i) The global dual structure centre (rich and productive) vs periphery, which also tends to be reproduced at smaller economic scales. (ii) Domestic source: real-wage growth vs productivity growth. Insufficient real-wage growth leads to excessive debt accumulation, which endangers financial stability. (iii) Persistent global trade imbalances. (iv) Growth of transnational corporations. (v) Two views on the impact of globalization on economies: is it a stabilizing or a desatabilizing force? (vi) Is the increasing role of regional powers (EU, China and Japan) a stabilizing or a destabilizing global economic force? Do they favour discrimination excessively (preferential trade agreements)? (vii) Is the rise of China ultimately destabilizing for the global economy? (viii) Technological challenges: (a) is technological development out of control?; (b) is this development creating massive technological unemployment? (ix) Environmental challenges: (a) are we putting to an end the period of benign climatic conditions?; (b) is the working of the global economy depleting the stock of natural resources?

- **Sources of political instability**

  (i) How stable are international political alliances? (ii) How stable is an international state system lacking strong institutions of global governance? (iii) The Thucydides trap (risk of an all-out war between hegemon and contender to global dominance) and the Churchill trap (risk of a long-term confrontation between two major powers, as in the Cold War). (iv) Are emerging powers (China, India, Russia) sufficiently stable domestically? (v) The paradox of dominance: dominant powers create a system used by challengers to rise.