

# Global Imbalances and Financial Capitalism

The past few decades have witnessed the emergence of economic imbalances at the world level and within the euro zone. The failure of mainstream economics to accurately predict financial crises, or model the effects of finance-led growth, highlights the need for alternative frameworks.

A key text, *Global Imbalances and Financial Capitalism: Stock-Flow-Consistent Modelling* demonstrates that Stock-Flow-Consistent models are well adapted to study this growth regime due to their ability to analyse the real and financial sides of the economy in an integrated way. This approach is combined with an analysis of exchange rate misalignments using the Fundamental Equilibrium Exchange Rate (FEER) methodology, which serves to give a synthetic view of international imbalances. Together, these models describe how global and regional imbalances are created, as well as suggest appropriate tools through which they may be reduced. The book also considers alternative economic policies in the euro zone (international risk sharing, fiscal federalism, eurobonds, European investments, a multispeed euro zone) alongside alternative monetary policies. In particular, it examines the possibilities of using SDR (Special Drawing Rights) as a reserve asset to be issued to fight a global recession, to support the development of low-income countries, or as an anchor to improve global monetary stability.

This text will be of interest to students, scholars, and researchers of economic theory and international monetary economics. It will also appeal to professional organisations that supervise international relations.

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# **Global Imbalances and Financial Capitalism**

Stock-Flow-Consistent Modelling

**Jacques Mazier**

**with Vincent Duwicquet,  
Luis Reyes, Jamel Saadaoui,  
and Sebastian Valdecantos**

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# Introduction

*Jacques Mazier*

The aim of the book is to study different features of the finance-led regime that has settled in most industrialized countries since the late 1980s. Capital accumulation is driven by the financial rate of return and periodic crises appear as its normal adjustment mode. Recurrent global imbalances are another component of this growth regime with both a real and financial dimension. They are observed at the world level (US deficits facing Asian surpluses) and regional level (intra-European imbalances). Economic policies have been active to fight against crises, especially after 2008. The worst have been avoided but the mechanisms remain almost unchanged. These questions will be discussed using rather simple macroeconomic models at the national and international levels. The case of the European Union (EU), where the crisis of the euro zone has presented strong specificities due to the inconsistency of the monetary union, will be examined more in detail.

Since 2010 a long, though moderate, recovery has been observed in the United States, but the movement has been less pronounced in the EU and in Japan. China has almost succeeded to escape the 2008 crisis thanks to a huge demand support plan based on credit. China is shaping the world economy but, since the election of Donald Trump, the intensity of the trade war has escalated. Exchange rate policy has always been important for China and remains a possible answer. Special attention is paid to it. However, the future is uncertain. A slowdown can be expected in 2020 at the world level and yet another financial crisis cannot be excluded. The growth regime seems unsustainable, especially in the United States in spite of the room for manoeuvre given by the oil sector boom. The mechanisms at work before 2008 have not changed radically. This is all the more worrying given that the traditional economic policy tools have reached their limits. Public debt is high virtually everywhere, interest rates are close to zero in many countries, the balance sheets of central banks have increased considerably thanks to quantitative easing. In this context, although multilateralism is no longer fashionable, a global reform of the international monetary system based on an enlargement of the role of the Special Drawing Rights (SDR) deserves to be discussed.

Regarding the theoretical background, the financial crisis has shown the inability of mainstream models to explain it, in particular the so-called Dynamic

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Stochastic General Equilibrium (DSGE) models. More realistic assumptions have been integrated in these with asymmetric information, sticky prices or credit rationing, but their main assumptions remain based on the single representative agent maximizing a utility function. Since these are supply-side models, they take little or no account of finance and are based on unreliable hypotheses, which makes them rather unsuitable to explain growing world imbalances. The framework used in this book is different. It is macroeconomic without micro foundations, based on national accounts both in real and financial terms, Stock Flow Consistent (SFC) and mainly demand-led. Agents react to disequilibria on the basis of partial adjustment functions. Macroeconomic relations describe how the economic system can be reproduced from period to period inside the accounting framework (see Nikiforos and Zezza, 2017 for a survey). Following a Kaleckian perspective, long run evolution appears as a progressively changing component of short run sequences (Kalecki, 1965). According to the periods and the structural characteristics, real and financial business cycles or divergent evolutions can occur. SFC modelling is well suited to take into account the interaction between the real and the financial sectors which is a key issue of our times. Balance sheet constraints and revalorization effects, with capital gains or losses, are explicitly described. This SFC approach focuses on the macroeconomic forces at the domestic and international levels but remains mainly theoretical, even if simulations based on calibrations are made. In order to give a more empirical light on global imbalances the Fundamental Equilibrium Exchange Rate (FEER) methodology is used in complementarily. The FEER is defined as the level of exchange rate which allows the economy to reach simultaneously internal and external equilibrium. This approach allows a synthetic estimation of the equilibrium current accounts and of the exchange rate misalignments.

Since the burst of the financial crisis of 2008 several references have been made to Minsky (1986). In the Minskyan framework, the surge in investment during the upswing takes place thanks to an increase in external financing, which leads to the endogenous fragility of firms. The decrease in risk perceived by investors, that is, the reduction of investors' liquidity preference on financial markets, fosters a rising debt share in the firms' balance sheet. But this process ends because of an endogenous reversal of the liquidity preference which corresponds to a reversal of collective opinion in financial markets. As a consequence, credit risk is revised upward, which generates the fall in investment. When investors in financial markets start having doubts about the value of collateral, liquidity preference starts rising and this generates a fall in prices on financial markets. These doubts generate a revaluation of credit risk. Investors run towards liquidity, which thus leads firms to run strong insolvency risks since the refinancing of debt becomes difficult. A complete modelling of Minsky's analysis would be very complex and does not exist. However, we will see how some of the Minskyan mechanisms can be incorporated within the SFC approach.

The closest theoretical takes place via Godley and Lavoie (2007a) and Taylor (2004). Godley and Lavoie have laid the foundations of macroeconomic

SFC modelling. In the same theoretical framework, we pay more attention to empirical results, including econometric ones, and to calibration of the models, especially in the European case. The international dimension is more developed than in Godley and Lavoie's book but this question has been treated more in detail in several other articles (Godley and Lavoie (2007b) for the European case; Lavoie and Daigle (2011) for the introduction of expectations; Lavoie and Zhao (2010) for the treatment of Chinese exchange rate policy). Taylor (2005) is also a founding work. Compared to previous publications by the author, this one focuses more, from the outset, on social accounting matrices with their associate balance sheets and on macroeconomic SFC modelling. But his modelling technique is in continuous time, which has the disadvantage of demanding simplifications (sometimes quite important) in order to carry on the computations. By contrast, our modelling is in discrete time and relies more on simulations to study the properties of the models. In spite of a broad agreement with Taylor, we have one divergence on a specific point, the determination of exchange rates, as it will be developed more in detail.

Hein (2012) is another important reference. It is a systematic study of the finance dominated capitalism and its crises, which provides many stimulating results. However, some points seem debatable. First, most of the models studied in large detail are in a closed economy. This can be considered quite acceptable as a first step, but it can hardly be argued that they are meaningful to discuss international imbalances and coordinated economic policies. Second, the finance dominated economy is formalized in a very simplistic way. There is no price of equities, no difference between productive capital and financial capital or between the economic rate of profit and the financial rate of return. The balance sheet of firms and banks is described in an overly simplistic way. Strangely, there are no financial dynamics in this finance dominated economy. In contrast, we develop more elaborated models, first at the financial level with an analysis of the dynamics of equity prices and of the rate of interest, second at the international level with multi-country models and various exchange rate regimes. Simulations help manage these more complete SFC models.

The main themes of the book are the following. In a first part we will present the basic elements of the methodology used: SFC modelling for a closed economy, multi-country SFC model and FEER approach. At the same time a first look at the operating mode of the finance-led regime and of the world imbalances since the 1990s will be given. Chapter 1 is dedicated to a simple SFC model in a closed economy in order to provide a reference model for the other chapters of the book. Based on the French case, the main stylised facts of the finance-led regime are recalled. Simulations are used to reproduce some of the characteristics of the cycles of the 1990s and 2000s with the price of equities clearing the market. Chapter 2 provides an evaluation of the global imbalances using the notion of FEER. Current imbalances and exchange rate misalignments are estimated since the 1980s for the main countries (the

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United States, China, the Eurozone, Japan, the United Kingdom and the rest of the world). The main economic policy guidelines are reviewed within this framework. Chapter 3 analyses macroeconomic adjustments at the world level using a three-country SFC model (the United States, Europe, the rest of the world). This model also serves as a reference model for the other chapters of the book. Different exchange rate regimes are compared and used to analyse the global imbalances since the 1980s: the hybrid dollar standard with fixed dollar–yuan parity and a floating euro, a more elaborated Chinese central bank policy with reserves diversification, various regimes with more flexible dollar–yuan parity.

In a second part we focus on the European challenges. Chapter 4 assesses the European integration since the early blocking of the European Monetary System (EMS) at the beginning of the 1980s. Intra-European exchange rate misalignments are estimated following the FEER approach as they have been a key issue at the time of the EMS, but also within the monetary union. The main drawbacks of the European economic policy from the Single Market program in the 1980s to the launching of the monetary union is given particular attention. The single currency trap since the burst of the financial crisis in 2008 and the reforms undertaken in emergency are analysed. The inconsistency of a monetary union between heterogeneous countries, almost without any adjustment mechanism except wage deflation, are highlighted. The risk of a status quo has led to many alternative proposals which are examined in Chapter 5: fiscal federalism, European unemployment insurance system, euro-bonds and public debt mutualisation, enlargement of the European financing in favour of southern countries, European investment programs. Simulations with an SFC model of the monetary union will show that these alternative economic policies could have either an efficient stabilising role (fiscal federalism, investment programs) or a more limited one (European stability mechanism, debt mutualisation). But in most cases, they will appear politically unlikely or hardly feasible. This persistent blocking leads to the discussion of a more radical alternative framework where the possibility of intra-European exchange rate adjustments would be reintroduced thanks to new monetary regimes: a multi-euro system or a euro bancor system. These regimes will be detailed and simulated with a four-country model (north Europe, south Europe, the United States and the rest of the world) in Chapter 6.

In a third part, without analysing all the threats to which is confronted the world economy, we focus on monetary issues. The future of monetary cooperation in East Asia is explored in Chapter 7 using four-country models (China, Japan, East Asia and the rest of the world). A rough description of the East Asian monetary regimes observed in the past is given (dollar-pegged regime, hybrid regime with more flexible East Asian exchange rates and more managed regime for the yuan). In a forward-looking framework, long-term scenarios are discussed: a rather unlikely yuan zone, a yuan block where the yuan–East Asia parity could be managed, Asian Currency Unit (ACU) regimes with various forms of ACU, an Asian bancor regime. In the last chapter, we analyse

to which extent a global reform of the international monetary system based on a deepening of the Special Drawing Rights (SDR) could contribute to stabilise the world economy and reduce the large global imbalances. Alternatives will be proposed for the emission criterion of SDRs (with regular or countercyclical emission) and for the distribution criterion of SDRs (according to each country quota or to each country's demand for reserves). A final part concludes.

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