

Fritz, Barbara; de Paula, Luiz Fernando; Prates, Daniela

## Article

# Currency hierarchy and financial globalization in emerging economies: how far does Riese's critique of growth by external debt still hold?

European Journal of Economics and Economic Policies: Intervention (EJEEP)

## Provided in Cooperation with:

Edward Elgar Publishing

*Suggested Citation:* Fritz, Barbara; de Paula, Luiz Fernando; Prates, Daniela (2022) : Currency hierarchy and financial globalization in emerging economies: how far does Riese's critique of growth by external debt still hold?, European Journal of Economics and Economic Policies: Intervention (EJEEP), ISSN 2052-7772, Edward Elgar Publishing, Cheltenham, Vol. 19, Iss. 2, pp. 260-277,  
<https://doi.org/10.4337/ejeep.2022.02.07>

This Version is available at:

<https://hdl.handle.net/10419/277549>

### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

### Terms of use:

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by/4.0/>

# Currency hierarchy and financial globalization in emerging economies: how far does Riese's critique of growth by external debt still hold?

Barbara Fritz\*

Professor of Economics, Institute for Latin American Studies and School of Business & Economics, Freie Universität Berlin, Germany

Luiz Fernando de Paula\*\*

Professor of Economics, Federal University of Rio de Janeiro (IE/UFRJ), Coordinator, Economics and Politics Studies Group, Institute of Social and Political Studies (IESP)/University of the State of Rio de Janeiro (UERJ) and Researcher, National Council for Scientific and Technological Development (CNPq), Brasília and Foundation for Supporting Research in the State of Rio de Janeiro (FAPERJ), Rio de Janeiro, Brazil

Daniela Prates\*\*\*

Senior Economic Affairs Officer, United Nations Conference on Trade and Development (UNCTAD), Geneva, Switzerland

*How has financial globalization changed the nature of the external vulnerability of emerging economies? The authors first present an overview of the changes in international capital flows and cross-border stocks involving emerging economies from the 1970s to the COVID-19 crisis, and then identify relevant recent shifts in financial globalization. They depart from the critique of growth by debt strategies, put forward, among others, by Riese, and the concept of currency hierarchy. Their question is whether this critique still holds when one considers the main recent features of financial globalization. They find that Riese's contributions are still relevant when analysing the external vulnerability of emerging-market economies (EMEs), even with caveats that stem from his oversimplified view of the financial sector. They conclude that financial vulnerability overall has not decreased, but rather has changed its nature and the channels through which it affects EMEs, becoming more complex.*

**Keywords:** *external vulnerability, currency hierarchy, subordinated financial integration, financial globalization, emerging-market economies*

**JEL codes:** *F32, F34, F62*

\* Corresponding author: email: barbara.fritz@fu-berlin.de.

\*\* Email: luiz.fpaula@ie.ufrj.br.

\*\*\* Email: daniela.prates@unctad.org. This article expresses the author's opinion and does not necessarily represent the view of UNCTAD.

Received 23 March 2022, accepted 18 May 2022

## 1 INTRODUCTION

The triple health, economic and financial COVID-19 crisis brought special hardship to most emerging-market economies (EMEs).<sup>1</sup> They suffered – as it happened at the global level – from local lockdown measures, the virtual collapse of tourism and global trade, and the interruption of global value chains, while they have less policy space to adopt counter-cyclical measures and were hit by record capital outflows.

The unprecedented pro-cyclical response of global financial investors certainly relates to the new level and form of integration into financial globalization that emerged after the 2008 global financial crisis. On the one hand, we observe a wave of external debt accumulation during the 2010s (UNCTAD 2019). On the other hand, most EMEs have accumulated high levels of foreign-exchange reserves, and – to different degrees – the share of international investors' assets denominated in domestic currency has increased. This new wave of instability places the new configurations of EMEs' external vulnerability under the spotlight.

In this paper, we depart from Hajo Riese's contributions to development economics, which was mainly theoretically based but also outreached economic development strategies. We identify two main contributions. The first one is his criticism of the growth-*cum*-foreign savings strategy, which is the focus of this paper. The second is what he called a 'theory of successful transformation'.

However, the world of global finance has changed since the 1980s and 1990s. One key shift is that international financial relations between advanced economies (AEs) and emerging-market and other developing economies are not based mainly on bank credit, as was the case until the 1970s, but have diversified towards portfolio debt and equity. While these changes have been widely discussed in the literature, the second major change has been much less conceptualized until now: the shifting behaviour of international investors during the past decade, from lending to EMEs mainly in US\$ as the dominant currency to increasing investment in EMEs' currencies, mostly in domestic financial markets.

The first question in this paper is whether the critique on growth based on external debt, as formulated by Riese, still holds today; and, second, what is the impact of recent changes on the growth-*cum*-foreign savings strategy of EMEs?

Financial globalization today is subject to fierce debate. Thus we also draw on recent strands of critical discussion that emphasize the inherent instability of capital flows (that is, Stiglitz/Ocampo 2008). Especially relevant for the case of EMEs are concepts that consider the asymmetric nature of financialization and financial globalization, such as subordinated financial integration (Kaltenbrunner/Paincera 2017; Bonizzi et al. 2020), and the centre-periphery configuration of the international monetary system, such as the concept of currency hierarchy (Paula et al. 2017; Fritz et al. 2018; see also Andrade/Prates 2013), which can be linked to the work of Riese, among others.

Our first and main hypothesis is that vulnerability overall has not decreased, but rather it has changed its nature and the channels through which it affects EMEs, becoming more complex. The second is that, when we try to formulate a conceptual critique nowadays to the external financing of development, it must be expanded not only to include new forms of debt in foreign currency but also to include short-term investment in EMEs' currencies.

The paper is divided into four further sections. Section 2 provides an overview of the changes in financial flows to EMEs, together with a periodization of the regimes of financial internationalization and globalization from the 1970s to today. Section 3 reconstructs

1. We define EMEs as developing economies (or peripheral countries) that have engaged in financial globalization. We will use EMEs and emerging economies as synonyms.

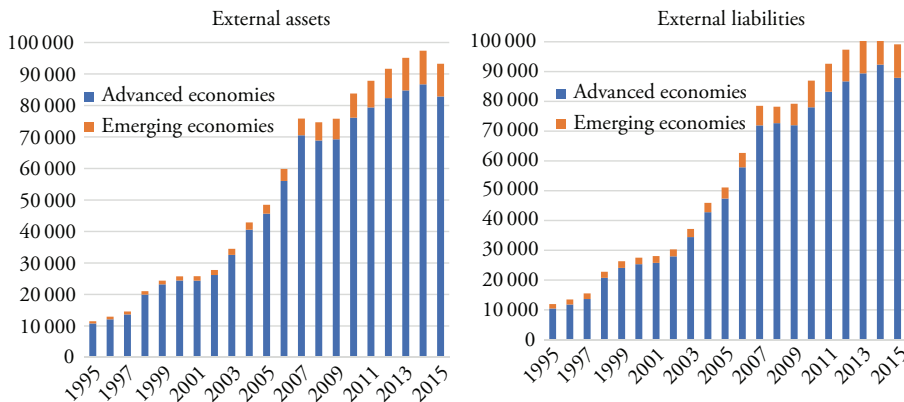
Riese's key contributions to this debate, making them available to an international audience, especially within development economics, and links them with the concept of currency hierarchy. Section 4 expands the theoretical framework of currency hierarchy to include new patterns of global finance. Section 5 concludes the paper.

## 2 NEW PATTERNS OF CAPITAL FLOWS AND CROSS-BORDER STOCKS INVOLVING EMEs

### 2.1 Overall picture: ever-greater volumes, diversified channels, and actors

Since the mid 1990s, there has been a remarkable and steady expansion in cross-border global capital flows in the world and consequently of cross-border stocks. EMEs still account for a small, albeit growing, share of these stocks (Figure 1). However, despite the residual nature of capital flows directed to these economies, their potentially destabilizing effects on their financial markets and exchange rates are significant, since the volume allocated by global investors is not marginal in relation to the size of these markets. This financial asymmetry stems from the fact that international financial integration takes place between 'unequal partners' (Stuart 2006).

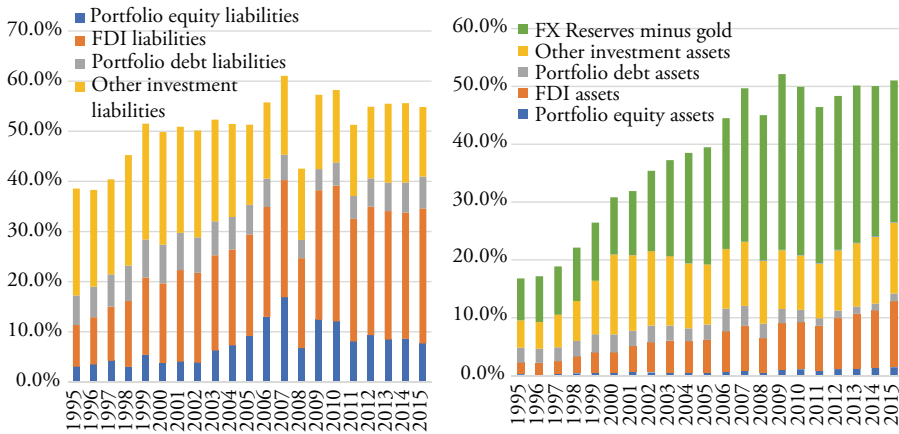
The value of EMEs' gross foreign assets and liabilities has significantly increased in absolute terms, and to a lesser extent as a proportion of GDP, being accompanied by significant changes in the structure of external balance sheets (Figure 2). The unprecedented increase in foreign reserves – as a form of self-insurance to prevent a sudden reversal of speculative capital flows in EMEs – is the largest change on the asset side (more than 50 per cent of total assets on average in 2004–2015, according to our calculations using data from Lane/Milesi-Ferretti 2017). Foreign-exchange-reserve accumulation mostly originates from capital inflows, while only in a few countries is this the result of cumulative current-account surpluses. At the same time, foreign direct investment (FDI) increased from 3.5 per cent of GDP in 2000 to 7.8 per cent in 2007 (17 per cent of the total assets),



*Note:* a. Major EMEs: Argentina, Brazil, China, India, Indonesia, Mexico, Poland, Russia, Thailand and Turkey; major AEs: Australia, Canada, euro area, Japan, Korea, Switzerland, Thailand, United Kingdom and United States.

*Source:* Authors' elaboration with data from Lane/Milesi-Ferretti (2017).

*Figure 1* Global external assets (left) and external liabilities (right)<sup>a</sup> (US\$ billion)



Note: a. See Figure 1.

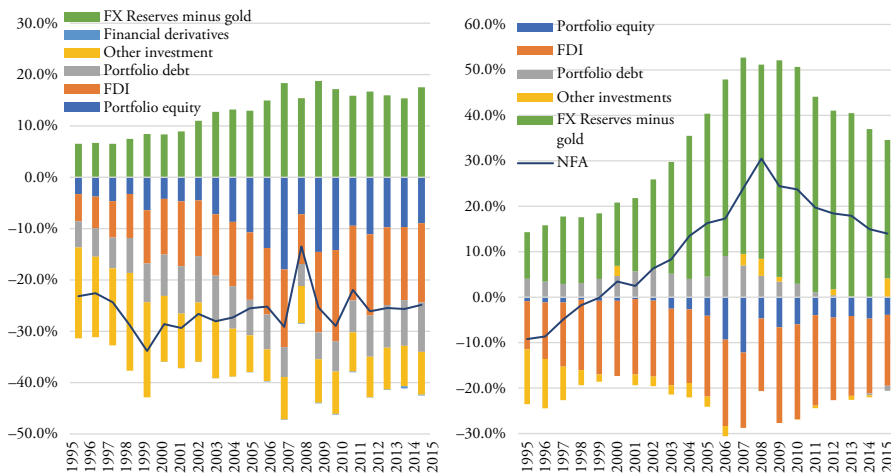
Source: Authors' elaboration with data from Lane/Milesi-Ferretti (2017).

Figure 2 External liabilities (left) and external assets to GDP (right): major EMEs<sup>a</sup> (percentage), 1995–2015

thanks to the emergence of transnational firms in major EMEs such as Brazil, China, India and Turkey. On the liability side, where the composition has been more diversified, the share of both FDI and equity portfolio has grown at the expense of other investments (where private external debt has been growing faster than public external debt), reducing their share from 45 per cent in 1999 to 25.2 per cent in 2015.

Figure 3 shows the net external position of EMEs (total external assets less total external liabilities) without China, and only China: the composition of the net position is similar, as both have a predominance of foreign reserves and FDI, which is still negative for both despite its growing participation in external assets. Only China has been a net creditor since 2000 due to its enormous foreign-reserve accumulation (declining since 2011 due to the increase of GDP and also due to some interventions to stabilize a weak RMB), enabled by the combination of a current-account surplus and large FDI, while other EMEs have been net debtors (Figure 3). Another recent trend is that China gaining weight in the global economy has increasingly shaped the capital flow patterns of EMEs.

The value of EMEs' gross foreign assets and liabilities has significantly increased in absolute terms, and to a lesser extent as a proportion of GDP, being accompanied by significant changes in the structure of external balance sheets (Figure 2). The unprecedented increase in foreign reserves – as a form of self-insurance to prevent a sudden reversal of speculative capital flows in EMEs – is the largest change on the asset side (more than 50 per cent of total assets on average in 2004–2015, according to our calculations using data from Lane/Milesi-Ferretti 2017). Foreign-exchange-reserve accumulation mostly originates from capital inflows, while only in a few countries is this the result of cumulative current-account surpluses. At the same time, FDI increased from 3.5 per cent of GDP in 2000 to 7.8 per cent in 2007 (17 per cent of the total assets), thanks to the emergence of transnational firms in major EMEs such as Brazil, China, India and Turkey. On the liability side, where the composition has been more diversified, the share of both FDI and equity portfolios has grown at the expense of other investments (where private external debt has been growing faster than public external debt), reducing their share from 45 per cent in



Note: Net external position = external assets minus external liabilities. a. Argentina, Brazil, India, Indonesia, Mexico, Poland, Russia, Thailand and Turkey.

Source: Authors' elaboration with data from Lane/Milesi-Ferretti (2017).

Figure 3 Net external position: major EMEs<sup>a</sup> (without China, left) and China (right), as a percentage of GDP, 1995–2015

1999 to 25.2 per cent in 2015, while FDI increased from 8.2 per cent of GDP in 1995 to more than 24 per cent of the total liabilities since 2009.

Another new trend in the composition of several EMEs' external liabilities in the 2000s is the increasing share of public debt, denominated in domestic currency, held by non-residents. According to Akyüz (2015a: 41), this share accounts for more than 25 per cent of the total in most EMEs in 2013 (Indonesia, Malaysia, Mexico, Peru, Philippines, Russia, South Africa and Turkey). A similar pattern has evolved in non-resident holdings in stock markets (portfolio equity) as a percentage of market capitalization (Table 1). The greater reliance on local-currency-denominated public debt mitigated the currency mismatch in the balance sheet of the EMEs' governments, reducing the vulnerability to exchange-rate volatility, but frequently creating maturity mismatches (given the shorter maturity of domestic treasury bonds) and shifting the currency mismatch to the balance sheets of foreign investors, who have assets in EMEs' currency but obligations in their domestic currency.

## 2.2 Financial internationalization and globalization: a periodization of capital flow cycles to EMEs

The increasing volume of capital flows to EMEs and the resulting changes in the dimension and composition of their external liabilities and assets, as described above – together with the diversification of financial instruments and investors – has led to a growing internationalization of finance in EMEs. This, in turn, is part of a broader global regime shift.

Part of the mainstream literature sustains that this new era promises more stability to the world economy due to a greater share of less volatile FDI and equity flows, even if volatile capital flows bring the risk of financial contagion (McKinsey Global Institute 2017). Against this, we argue in this paper that these structural changes have created new

*Table 1 Non-resident holdings in stock markets (percentage of market capitalization)*

Country	2001	2007	2012
Argentina	1.4	5.7	8.2
Brazil	18.2	21.2	23.4
China	2.5	6.6	13.5
India	12.1	18.1	19.8
Indonesia	15.6	19.0	19.9
Malaysia	10.5	20.8	17.0
Mexico	32.2	29.9	22.1
Philippines	8.3	18.5	10.8
Russia	14.4	12.4	16.7
South Africa	9.3	10.2	19.7
Thailand	27.8	29.0	27.0
Turkey	9.4	17.0	20.2

Source: Akyüz (2015a: 22).

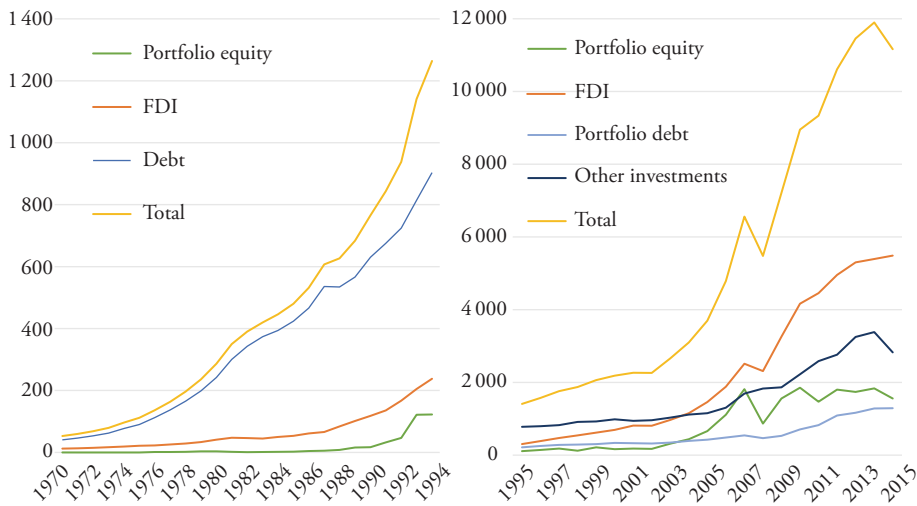
transmission channels of financial shocks through international capital flows and new sources of external vulnerability to EMEs (see Section 4).

After the global financial crisis, two trends of capital flows to EMEs in force since the 1990s have deepened. The first one is the increasing share of foreign capital channelled through investment funds and other portfolio investors to capital markets due in part to the withdrawal of AEs' banks from international lending. Consequently, in many countries, portfolio investors have surpassed banks as the largest source of foreign credit. The second is the phenomenon called 'financialization' of FDI, related to the rising complexity of corporate structures and consequent rise in intra-firm transactions, as transnational companies pursue different financial and tax strategies in order to reduce costs. Furthermore, loans from parent multinational companies to subsidiaries are booked as FDI in spite of the fact that they are debt (Akyüz 2015b). The rising importance of portfolio investors and financialization of FDI exposed EMEs to new risks (CGFS 2021; see also Figure 4).

These two trends are key features of what Chesnais (1996: 10–11) called *financial globalization*, which was triggered in the early 1990s by the rapid increase in liquidity and the huge decline in interest rates in the US and Japan, followed by a sovereign-debt restructuring in Latin America and the capital-account liberalization of many EMEs. The previous phase of internationalization of finance in EMEs, called *financial internationalization*, began in the 1970s with the increase in international commercial lending (mainly from 'eurodollar' markets), driven by a rapid expansion of international liquidity associated with oil surpluses and growing US external deficits, and ended with an external debt crisis in Latin America in the 1980s.

Taking a closer look at the unfolding of financial globalization and its impact on EMEs, we can identify three main sub-periods. The first started at the beginning of the 1990s and ended with a sequence of financial crises in Latin America, East Asia and Russia at the end of that decade. The second wave began with the new millennium, coming to an abrupt halt in 2008 with the global financial crisis. Triggered by aggressive policies of quantitative easing by AEs' central banks, the third cycle of financial globalization started with greater and more diversified capital flows to EMEs.<sup>2</sup> The inherent

2. According to CGFS (2021: 1), 'these changes reoriented rather than reduced concerns about the potentially adverse impacts of exceptionally large or volatile flows. In particular, extreme swings in non-resident inflows still pose a significant risk to macroeconomic and financial stability'.



Notes: On the left graph, debt = other investments plus portfolio debt. a. Major emerging economies: Argentina, Brazil, China, India, Indonesia, Mexico, Poland, Russia, Thailand and Turkey. Source: Authors' elaboration with data from Lane/Milesi-Ferretti (2017).

Figure 4 External liabilities of major emerging economies,<sup>a</sup> 1970–1994 (left) and 1995–2015 (right) (US\$ billions)

volatility of these flows reached its peak in the months immediately after the outbreak of the COVID-19 crisis.<sup>3</sup>

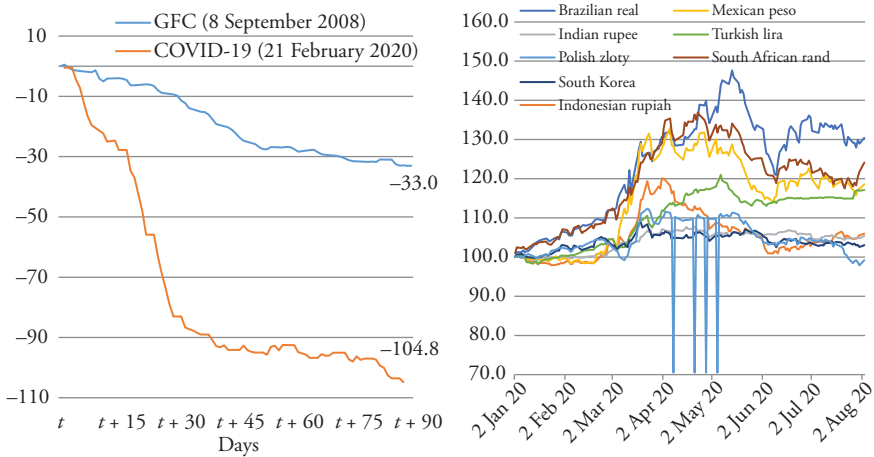
While debt operations (mainly bank loans) predominated during the cycle of financial internationalization, the first cycle of financial globalization began with some changes in the composition of capital inflows, with a gradual increase in FDI. However, it is in the second and third capital-flow waves of financial globalization that major changes occurred. Besides the much larger total flows, their composition became more diversified, favoured – among others – by carry-trade operations to explore interest differentials, the internationalization of global value chains, the enormous push of FDI to and from China, and the liberalization of local capital markets to foreign investors (see Figure 4).

### 2.3 Capital flows under COVID-19

The COVID-19 pandemic led to the burst of the third wave of capital flows under financial globalization. The high uncertainty related to the spread of the pandemic hugely increased fears about the future, triggering unprecedented portfolio outflows from EMEs, first reaching equity markets and in the sequence bond markets, resulting in deflation in equity prices, a sharp increase in bond spreads, and abrupt currency

3. This sequencing obviously entails regional and country-specific variations, which we cannot detail due to space constraints. Here, the group of so-called 'frontier markets' of Sub-Saharan Africa and other poorer countries in terms of per-capita income (IMF 2019) certainly represents one of the major variations. These only entered into financial globalization after the 1990s or the 2000s, and to date they demonstrate a lower and less complex degree of global financial integration.





Note: a. Selected: Brazil, China, India, Indonesia, Mexico, Pakistan, Philippines, Qatar, Republic of Korea, Saudi Arabia, South Africa, Sri Lanka, Thailand, Turkey and Vietnam.  
 Source: UNCTAD secretariat calculations based on IFF Daily Emerging Market Portfolio database.

Figure 5 Net portfolio outflows from selected EMEs<sup>a</sup> – US\$ billions (left) and exchange rate (US\$/local currency; 100 = 2 January), January–August 2020 (right)

depreciation. Net outflows amounted to US\$104.8 billion during the COVID-19 crisis, more than three times the US\$33 billion recorded in the global financial crisis (Figure 5). However, since April 2020 this movement has lost momentum with the partial recovery of portfolio capital inflows to EMEs, which has led prices of many assets to return close to the levels they held prior to the panic sell-off (Wheatly 2020). As central banks of major AEs have unleashed unprecedented amounts of liquidity in response to the recent crisis, and the Federal Reserve (Fed) has started to provide large amounts of US dollar liquidity at the global level, for example by providing central-bank swaps to key partner central banks, this has led to a restabilization of very low-interest rates for US\$-denominated assets. Thus, global investors have had little choice but to search for yield in EMEs.

One determinant of the record capital outflows from EMEs during the COVID-19 crisis is the increasing importance of benchmark-driven funds, which follow a flagship benchmark index with a predefined list of countries and securities with specific weights (JP Morgan EMBI or Morgan Stanley's MSCI), and which are much more influenced by push factors: the behaviour of these funds contributed to the strong correlation across asset managers' portfolio decisions during the COVID-19 crisis, reinforcing the herding behaviour of investors that is typical in such circumstances.<sup>4</sup>

The combination of the COVID-19 crisis and the steep decline in oil prices led to sharp currency depreciation in EMEs between the end of February and mid/late March 2020, a

4. In the same vein, CGFS (2021: 2) argues that 'passive investment strategies and other practices in the asset management industry can give rise to herd behaviour and contagion, such as when changes to a bond or equity index trigger a rebalancing by the portfolio investors tracking the index. Also, unhedged investments can amplify feedback loops between exchange rates and asset prices, potentially resulting in destabilizing dynamics'.

trend that continued in April in some countries like Brazil, South Africa and Turkey more than in others<sup>5</sup> (Figure 5).

The greater presence of foreign investors in local capital markets has increased the transmission of international financial shocks to these markets, as surges in the entry and exit of non-residents affect not only asset prices but also exchange rates. Indeed, huge currency depreciations have a strong impact on EMEs. First, as most EMEs accumulated corporate external debt prior to the COVID-19 crisis, driven by historically low borrowing costs and various incentives favouring debt over equity, freefalling exchange rates along with a sharp rise in spreads have increased the costs to borrowers paying foreign currency debt (OECD 2020). Second, the reduction of financial assets' values in foreign investors' domestic currency eventually triggered the sale of financial assets by non-residents, which resulted in further capital outflows (Hofmann et al. 2020).

### 3 FROM THE CRITIQUE OF GROWTH-CUM-DEBT TO A STRATEGY OF CURRENCY UNDERVALUATION: RECAPITULATING RIESE'S CONTRIBUTIONS TO DEVELOPMENT ECONOMICS

Hajo Riese was a fundamental-theoretical economist, providing a strictly monetary understanding of Keynes. Beyond theory, he was mainly interested in German post-war economics and German economic policy and published exclusively in German. But the debt crisis of the developing countries in the 1980s, and later the collapse of socialism in East Germany and Eastern Europe, inspired him to attempt a theoretical grounding of the phenomenon of underdevelopment, and of the transformation from planned to market economies, always from the perspective of his monetary view of Keynes – or, as he called it, based on market theory. On the topic of the debt crisis and underdevelopment, a lively exchange between him and his research group at the economics department and the economists at the Institute for Latin American Studies, both at the Freie Universität Berlin, emerged (that is, Nicolas 1995; Nitsch 1995; 1999; Fritz 2002).

Here, we will present his two main contributions to development economics: first, his critique of the deconstruction of what he called the 'myth of resource transfer' (Riese 1986 [2004]), and, second, his conceptualization of a differential of liquidity premia between different currencies as the basic idea for what he called a market-based theory of development (Riese 1993 [2004]).<sup>6</sup>

Even if Riese was certainly not the only one to unveil theoretical flaws in debt-led growth, in the 1980s not only mainstream economics but also most economists within the Keynesian context, including many structural economists, still saw external debt as a solution to overcome what they identified as a savings gap of developing economies. So, to get a better idea of what in those times represented a fundamental attack on the standard growth-cum-debt model, we will first introduce the basic ideas of development

5. Hannan (2018: 13–14) provides a clue for understanding the different EMEs' reactions to an external financial shock: 'The more recent work shows that while the incidence of capital flow surges depends on external factors, whether a particular emerging market economy receives that surge depends on domestic factors, including the extent of financial market liberalisation and global financial market integration'.

6. To make Riese's contribution available to an international readership, we basically refer to two papers which later were translated into English and published in a collection edited by Hölscher/Tomann (2004).

based on external finance, to gain an understanding of what exactly he was arguing against in his time.

Development economics, a young field emerging only after the Second World War, was fully dominated by the idea of a so-called savings gap. Early development economists such as Nurkse (1953) defined it as a vicious circle of poverty and underdevelopment that would lead to low savings, thus not providing enough domestic funds for investment. Low investment, then, would prevent productivity from rising, producing low incomes and again low savings. Most Keynesian and neoclassical approaches to economic development postulated this savings gap as one of the central obstacles to overcoming underdevelopment. This gap would have to be filled by capital imports, whether in the form of loans or direct investment, to allow the realization of a sufficiently high investment rate for catch-up development.

Early approaches (Chenery/Strout 1966) based their approach on a very simplistic and at that time standard model: the Keynesian Harrod–Domar growth model. They applied it to development assistance and, more generally, to capital imports to enable catch-up development. Subsequently, the idea of the savings gap turned into a key part of neoclassical growth models from Solow and others, where capital transfer from capital-rich (developed) countries to capital-poor (underdeveloped) countries should spur up investment and allow for catch-up growth. Although Harrod, the main author of the theorem, later withdrew it because he considered it theoretically weak (Easterly 1997: 2), it still haunts the models of IMF and World Bank economists in the form of the calculation of capital-import requirements to achieve a certain growth rate (Easterly 1997; Fritsche 2002: 114ff). To this day, the concept occasionally haunts the development economics literature, for example in Dim/Ezenekwe (2014).

In the course of the 1970s' neoclassical turn, which also reached development economics, capital imports retained their strategic importance for development despite the approaches' theoretical weaknesses. Yet emphasis was laid now not only on the quantity but especially on the quality of capital imports and the investments realized with them. As Sachs (1985) put it, in evaluating the economic performances and debt crises of Asia and Latin America, it was not the level of external debt that distinguished the two regions, but the use of foreign currency: for export-oriented investment in the case of Asian countries such as South Korea and Indonesia, or to finance the private sector's accumulation of foreign assets, rather than an increase in export capacity, in Latin America (*ibid.*: 525).

In the 1990s, without changing the theoretical foundations, attention shifted, in addition to the 'usage hypothesis', towards the relevance of balanced public budgets. The idea was that, as long as there was no public deficit indicating a misallocation of imported resources due to the assumed lower efficiency of the state compared with the private sector, a rising current-account deficit should be seen as evidence of a correct economic policy, not an expression of its inconsistency. Correctly allocated investments based on external hard currency financing would lead to growth and thus to an increase in exports, which would then make it possible to repay foreign liabilities (Corden 1994: ch. 6).

In the 1990s, the debate was no longer framed by a savings or financing gap, but rather by the pros and cons of financial-account liberalization, which would allow international capital to flow to EMEs, and by the issue of debt sustainability. In particular, the idea of an optimal efficiency of capital global allocation stems from the Heckscher–Ohlin theorem, according to which the return rate of production factors of each country depends on the relative supply of the production factors. Furthermore, countries with capital shortages would have a marginal investment return higher than the return rate of developed countries with capital abundance. The free capital flows, under efficient markets, would allow the search for marginal income in developing economies that reduces the capital shortage

in these countries (Fischer 1998: 2). Therefore, external savings in the form of capital flows would complement domestic savings, resulting in more investment and consequently higher economic growth.<sup>7</sup>

As already mentioned, Riese's critical contributions to this debate always departed from a fundamental-theoretical perspective. For his critique of external debt-led growth or the 'myth of resource transfer', as he called it (Riese 1986 [2004]), he started with the Keynesian idea of money as a means to overcome insecurity, expressed by the liquidity premium, and went against the loanable-funds theory: he argued that savings were no necessary precondition for investment; rather, money could be produced endogenously by banks. Thus growth was determined by credit-funded investment, based especially on credit creation *ex nihilo* through commercial banks.<sup>8</sup> But this process of money creation needed to be backed by the central bank, which, as a lender of last resort in this currency, could provide unlimited liquidity in its own currency for solvent banks, while at the same time keeping money stable and scarce. Savings were the result, not the beginning, of this process of income formation.

From there, he went on to analyse the functional effects of capital imports to developing countries in foreign currency. He argued that such imports, even if used for purchasing technology or investment, as put forward by the 'usage hypothesis' (see above), would have a consumption rather than an investment effect, as all capital imports would increase the demand for domestic currency and, *ceteris paribus*, appreciate the exchange rate. This, however, would reduce the external price competitiveness of a country, reducing export volumes and the capacity to grow out of debt by cumulative export surpluses. Thus, contracting external debt would lead to debt crises and further deepening of underdevelopment. A successful development strategy, he argued, should definitively and strategically avoid contracting external debt.

In the next paper, also translated into English (Riese 1993 [2004]), he combined this critique with his Keynesian reading of money and the interest rate. Especially, he applied the Keynesian concept of the liquidity premium as a criterion to differentiate currencies from each other in terms of their quality as means of payment (we refer to this concept in our definition of the currency hierarchy; see below). And he argued that this divergence in the liquidity premium of different currencies had to be compensated by both the interest and the profit rate in order to enable a process of income formation, strictly linked to the national economy and its currency.

This approach is based on a theory of interest-rate parity with a structural component implying a long-term preference for a specific currency. This complements Riese's approach of a rather simplistic and perfect financial market, consisting only of commercial banks (see also footnote 8). In the following, we will especially address the need to update the implications of different liquidity premia to today's complex and fractioned patterns of financial markets (see Section 4 below). For a process of national income formation, he argued, the interest-rate differential compensating the difference in the liquidity premium

7. The empirical literature assessing the relationship between financial liberalization and economic performance remained rather inconclusive. In an influential IMF study, Prasad et al. (2003: 6) resume the empirical findings of the literature as follows: 'a systematic examination of the evidence suggests that it is difficult to establish a robust causal relationship between the degree of financial integration and output growth performance'; a similar result was put forward by the World Bank (2001).

8. One of the limitations of Riese's approach is that he always modelled not only a perfect but also a very simplified financial sector, with a single agent and commercial banks, without considering other types of financial institutions, such as stock exchanges, etc., even if this already failed to reflect the empirical reality of financial globalization in the 1990s.

is necessary to create incentives to keep monetary wealth or wealth in general in this currency, as a basis for (central-bank-based) credit creation by banks for investment finance. To clarify this process of income formation depending on the specific liquidity premium of a currency, he differentiated between what he called a coherent and an incoherent liberal market system:

*A coherent market system* is characterized by successful income formation; an *incoherent market system* by unsuccessful income formation. ... An internal income formation, manifest in a rate of profit which exceeds the rate of profit of the market-coherent economy of reference by its relative premium of liquidity, thus forms the necessary condition for a successful transforming economy. ... From the perspective of the monetary sphere, which steers income formation, one could also talk about the need in a successful transformation of a *contractible currency*. ... Market-theoretically, a contractible currency is the existence of a rate of interest, which, with a stable exchange rate, balances out supply of and demand for a foreign currency. (Riese 1993 [2004]: 155f, emphases in original<sup>9</sup>)

To achieve such a coherent market system of successful income formation in domestic currency, it is necessary to have a strategy of development based on strategic currency undervaluation. The idea is to create appreciation expectations for wealth owners and investors so that they have a greater incentive to hold this currency instead of another currency, since in the long term they will profit from this.

Riese's historical references for such a development process were the quick ascension in the global economy of Germany and Japan during the post-Second World War period based on a strategic currency undervaluation. In the midst of the 1990s' fierce debates on economic globalization and the dwindling role of national states, he emphasized that this strategy is focused on the nation-state, which has to define its policy of economic integration into the world economy but is based on a national income formation process in the domestic currency. However, his knowledge of the economic literature on developing countries was no more than scarce, as demonstrated by the shortness of his writings' bibliographies. So, from the Latin American economic structuralism, to our knowledge, he only occasionally referred to Prebisch and his model of peripheralization of developing countries through global free trade (that is, Riese 1992 [2004]; 1997) and more often to the nineteenth-century German economist Friedrich List as pre-successor of dependency theories and the argument for infant industry protectionism (that is, Riese 1993 [2004]: 155).

Other economists around Hajo Riese, especially Lüken gen Klaßen (1993), Schelke (1994) and Herr (1997), took up this idea and laid out a much more detailed and careful strategy of 'de-peripheralization', as they called it. Lüken gen Klaßen especially, in her work of 1993, formulated the concept of currency competition, specifying the strategy of development as one of de-peripheralization, based on strategic competition with other currencies via undervaluation of the currency as a general form of protection against established economies in the global world. To our knowledge, Herr (1988) was the first one to use the term 'currency hierarchy'.

#### 4 CURRENCY HIERARCHY AND NEW FORMS OF FINANCIAL INTEGRATION OF EMEs

The current debate is less directly linked to the critique of growth by debt, presented above, but rather is focused on a critical discussion of financial internationalization and

9. Quotes and page references are always from the translated versions.

globalization. Although financial globalization has changed the risks associated with capital inflows to EMEs, related among others to the rising importance of portfolio investors, such new risks, analysed in this paper, can be seen as ‘old risks in new clothes’. Furthermore, Riese can also be considered one of the pioneers of the development of the concept of currency hierarchy, as we have seen above.

Critical discussion regarding the effects of financial globalization on EMEs – in particular related to the more recent boom–bust cycles – comes from diverse strands. Especially relevant are the concepts of centre–periphery, currency hierarchy, and subordinated finance, which result in global asymmetries. EMEs’ ‘subordinated financial integration’ is the form of insertion of peripheral countries in global finance, and the way in which global finance and domestic economies are connected, whereby ‘not only is financialisation fundamentally shaped by ECEs’ [emerging capitalists economies] subordinated position within the international financial economy, but also that financialisation itself cements this position and exacerbates uneven development’ (Kaltenbrunner/Painceira 2017: 304). This calls for a discussion about international monetary asymmetry, as EMEs that issue what we call peripheral currencies (that is, currencies that are not accepted at the international level, and in some EMEs and developing countries not even accepted in full terms for domestic purposes) have a subordinated insertion in the international monetary system (see also Ocampo 2001).

In this vein, and based on the monetary Keynesian approach presented above (in Section 3), as well as on Latin American structuralist concepts (Ocampo 2001; Belluzzo/Carneiro 2004), as brought together in a first version by Nitsch (1995; 1999), and further developed in our prior work (Paula et al. 2017; Fritz et al. 2018; see also Andrade/Prates 2013), in the following we apply the structuralist concept of an asymmetric global economy divided into two poles – centre and periphery – to the analysis of the international monetary system. This approach states that currencies are hierarchically positioned according to their degree of liquidity, which inclines (or does not incline) wealth owners and investors towards holding longer-term assets in this currency. The key currency (currently the US fiduciary dollar) is placed at the top of the hierarchy because it has the highest degree of liquidity. The currencies issued by the other centre (or advanced) countries/regions (such as the euro and the yen) are in intermediate positions and they are also liquid currencies. At the opposite end are the currencies issued by the peripheral economies, which are non-liquid currencies as they are incapable of performing the basic functions of money (medium of exchange, denomination of contracts, and international reserve currency) at the international level, and to a degree even at the domestic level.

Indeed, with its formalization of the liquidity premium in relation to other valuation attributes of assets, the concept of currency hierarchy enables us to capture more precisely the effects of financial globalization in EMEs, especially in the recent cycles.

To compensate for the differences in liquidity premia between centre and periphery assets, less liquid currencies need to offer higher total returns to be attractive to international investors, such as higher interest rates and/or higher capital gains (through asset price and/or exchange-rate appreciation) when compared with AEs’ currencies. Expressed formally, in the face of the lower liquidity premium ( $l$ ), to make a global investor hold their assets, EMEs have to offer higher monetary returns ( $a + q$ ) – where  $a$  is the expected appreciation/depreciation of the currency and  $q$  is the yield of the securities (measured by the interest rate) – and/or reduce the carrying cost by reducing regulation on the capital account ( $c$ ). In equilibrium, we have:

$$a_N + q_N - c_N + l_N = a_S + q_S - c_S + l_S, \quad (1)$$

where  $S$  denotes Southern or EMEs, and  $N$  denotes Northern or AEs.

As  $l_S < l_N$ , this difference has to be compensated by higher returns, so that:

$$(a_S + q_S - c_S) > (a_N + q_N - c_N). \quad (2)$$

Taking account of the recent changes in the composition of capital flows with the increasing share of portfolio debt<sup>10</sup> and equity in external liabilities, we additionally consider the valuation variation generated by changes not only in exchange rates but also in asset prices (equities, bonds).

Therefore, we extend the formal concept of currency hierarchy (formula (1)) by incorporating the yield differentials and assets' capital gains/losses, so that:

$$l_S < l_N \Rightarrow (a_{c:S} + a_{a:S} + q_{r:S} + q_{y:S} - c_S) > (a_{c:N} + a_{a:N} + q_{r:N} + q_{y:N} - c_N), \quad (3)$$

where  $a_c$  is currency appreciation/depreciation,  $a_a$  is asset-price appreciation/depreciation,  $q_r$  is the monetary returns derived from loans' interest rates, and  $q_y$  is the yield derived from fixed income securities (portfolio debt).

To better understand how the different liquidity premia shape foreign investors' portfolio decisions along with boom–bust cycles, we bring in Minsky's (1986) financial fragility hypothesis. He emphasises the inherent tendency of economic units to move from the state of robustness to financial fragility over time, 'due to shift in expectations that occurs over the course of a business cycle, and the way this shift is transmitted through the financial system' (Dymski/Pollin 1992: 40). This behaviour results in the adoption of increasingly small safety margins, giving rise to a growing financial fragility in the economy. To cite Minsky's (1982: 101, emphases added) most well-known aphorism: '*Stability* – or tranquillity – in a world with a cyclical past and capitalist financial institutions *is destabilising*'.

During *booms* of capital inflows – that is, stability and tranquillity – in the international financial markets (most of them geared initially by an expansionary monetary policy in the United States), global investors' preference for liquidity decreases,<sup>11</sup> leading to a fall in the weight given to the liquidity premium differential and a rise in global investors' demand for EMEs securities, associated with the favourable interest-rate differential (bonds) or expectation of capital gains (equity) in local markets (see formula (3) above).<sup>12</sup> This 'search for yields' results in an appreciation of the emerging currency, leading to an expectation of further appreciation (a rise in  $ac$ ): this, in turn, further increases the expected return differential, stimulating further capital inflows and increases in asset prices ( $aa$ ), reinforcing the currency appreciation.<sup>13</sup>

Two features of EMEs underlie these self-feeding interactions that increase the financial fragility over the boom phase and can lead to destabilizing dynamics in the bust phase. First, these investors are more likely to be drawn to exchange-rate returns that are greater for EMEs' currencies due to their higher volatility, stemming from their subordinated

10. As the division between portfolio debt and FDI is a regulatory one, with different limits of form shares in different countries, and not a functional one, part of what is formally defined as FDI might enter here. This applies even more to international remittances of FDI, that is, the exporting of profit earnings from FDI, which empirically are shown to be rather volatile, similar to portfolio flows (Lensink/Morrissey 2006).

11. Autonomous changes in the liquidity premiums are also possible and can trigger a boom phase, as well as financial deregulations.

12. For a formalization of the relationship between liquidity preference and liquidity premium, see Ramos (2019).

13. There are other factors which might feed a cumulative boom, such as high investment, high profit rates, and higher GDP growth, all these together fuelling investors' long-term expectations.

position in the currency hierarchy. Second, the demand from a few money managers is sufficient to trigger self-feeding interactions due to the already-mentioned financial asymmetry.

Over the boom phase, the continuity of investors' low liquidity preference leads to a sustained and gradual increase in the demand for EMEs' assets and hence a gradual currency appreciation path. Conversely, over the bust phases, by virtue of changes in the monetary policy in the AEs and/or an increase in the international liquidity preference, sudden capital outflows trigger deflation of EMEs' financial assets and an abrupt depreciation of EMEs' currencies, which are the main victims of global investors' flight to quality (Ramos 2019; see also Paula et al. 2017; Kaltenbrunner 2015).

## 5 CONCLUSION

As we have seen in this paper, Hajo Riese's monetary view of Keynes put forward a pioneering critique of growth-*cum*-foreign-savings strategy and what he called 'myth of resource transfer'. But he also prepared the grounds for the concept of currency hierarchy, with his developments based on the Keynesian concept of the liquidity premium as a criterion to differentiate currencies from each other in terms of their quality, especially as means of payment. He argued that this divergence in the liquidity premium had to be compensated by both the interest and the profit rate to enable a process of income formation, strictly linked to the national economy and its currency. This process of income formation would be undermined by a strategy of growth based on foreign-currency-denominated debt, as a surge of capital inflows could lead to a currency appreciation, undermining price-based competitiveness and hampering exports, so that debt servicing would require a currency devaluation in the long run. These devaluation expectations would hamper demand for holding the domestic currency, impeding such a process of domestic income formation and reinforcing economic peripheralization of countries with a low liquidity premium currency.

Such theoretical reflections were taken up by a younger generation of Austrian/German authors with access to his research mostly written in German and not translated into English, who contribute to developing the concept of currency hierarchy, such as Annina Kaltenbrunner (Kaltenbrunner 2015) and Barbara Fritz (Fritz et al. 2018).

In this paper, we have asked how new patterns of capital flows and cross-border stocks under financial globalization influence the external vulnerability of EMEs. We departed from the Keynesian-structuralist idea of an asymmetric configuration of the global monetary system, formalized in a concept of currency hierarchy that is shaped by the difference in the liquidity premia attributed to currencies of the centre (Northern) and peripheral (Southern) countries. We then extended this formal concept to theoretically grasp the increased relevance of portfolio flows and global investment in EMEs' currencies that we identify. Does this demand for currencies, which we assume to be located at the lower end of the currency hierarchy, represent a reversal of growth by foreign-currency-denominated debt, integrating international investment into domestic income formation? And does this empirically revert the critique of a growth-*cum*-foreign-saving strategy?

Based on our analysis, we find that Riese's contributions are still relevant for analysing the external vulnerability of EMEs, even with caveats that stem from his oversimplified view of the financial sector that even in the 1990s was much more complex than was displayed in his work. Our main conclusion is that external financial vulnerability overall has not decreased, but rather has changed its nature and the channels through which it affects EMEs, becoming more complex. Thus, when we nowadays formulate a conceptual critique of the external financing of development, it must be expanded not only to new forms of debt



in foreign currency but also to short-term investment in EMEs' currencies and other forms of capital flows that have gained relevance since the 1990s (such as intra-firm financial transactions).

## REFERENCES

- Akyüz, Y. (2015a): Internationalization of finance and changing vulnerabilities in emerging and developing economies, South Centre Research Paper No 60, January.
- Akyüz, Y. (2015b): *Playing with Fire: Deepened Financial Integration and Changing Vulnerabilities of the Global South*, Oxford: Oxford University Press.
- Andrade, R., Prates, D.M. (2013): Exchange rate dynamics in a peripheral monetary economy, in: *Journal of Post Keynesian Economics*, 35, 399–416, doi: 10.2753/PKE0160-3477350304.
- Belluzzo, L.G., Carneiro, R. (2004): O mito da conversibilidade, in: *Revista de Economia Política*, 24(2), 218–222.
- Bonizzi, B., Kaltenbrunner, A., Powell, J. (2020): Subordinate financialization in emerging capitalist economies, in: Mader, P., Mertens, D., van der Zwan, N. (eds), *The Routledge International Handbook of Financialization*, Abingdon, UK: Routledge, 177–187.
- CGFS (Committee on the Global Financial System) (2021): Changing patterns of capital flows, CGFS Papers No 66, May.
- Chenery, H.B., Strout, A.M. (1966): Foreign assistance and economic development, in: *American Economic Review*, 56, S679–733.
- Chesnais, F. (1996): Introduction générale, in: Chesnais, F. (ed.), *La Mondialisation Financière: Genèse, Coût et Enjeux*, Paris: Syros, 9–29.
- Corden, M. (1994): *Economic Policy, Exchange Rates, and the International System*, Chicago: University of Chicago Press.
- Dim, C., Ezenekwe, U. (2014): Capital flight to savings gap in Nigeria: an assessment of the socio-economic determinants, in: *International Journal of Economics and Finance*, 6(2), 75–86, doi: 10.5539/ijef.v6n2p75.
- Dymski, G., Pollin, R. (1992): Hyman Minsky as hedgehog: the power of the Wall Street paradigm, in: Fazzari, S., Papadimitriou, D. (eds), *Financial Conditions and Macroeconomic Performance*, Armonk: M.E. Sharpe, 27–61.
- Easterly, W. (1997): The ghost of financing gap: how the Harrod–Domar growth model still haunts development economics, World Bank Policy Research Working Paper, 1807, Washington, DC.
- Fischer, S. (1998): Capital account liberalization and the role of the IMF, in: *Essays in International Finance*, (207), 1–10.
- Fritsche, U. (2002): Stabilisierungs- und Strukturanpassungsprogramme des Internationalen Währungs fonds in den 90er Jahren: Hintergründe, Konzeptionen und Kritik, FU Berlin, unveröff, Dissertations-Manuskript.
- Fritz, B. (2002): *Entwicklung durch wechsellkurs-basierte Stabilisierung? Der Fall Brasilien*, Band 16, Marburg: Metropolis Verlag.
- Fritz, B., Prates, D., Paula, L.F. (2018): Global currency hierarchy and policy space: a framework for peripheral economies, in: *European Journal of Economics and Economic Policies: Intervention*, 15(2), 208–218.
- Hannan, S.A. (2018): Revisiting the determinants of capital flows to emerging markets: a survey of the evolving literature, IMF Working Paper WP/18/214, September.
- Herr, H. (1988): World money, the monetary system, and the instability of economic development in the 1970s and 1980s, Discussion Paper FS I 88-4, Wissenschaftszentrum Berlin für Sozialforschung.
- Herr, H. (1997): The international monetary system and domestic policy, in: Forsyth, D.J., Notermans, T. (eds): *Regime Changes: Macroeconomic Policy and Financial Regulations in Europe from the 1930s to the 1990s*, New York and Oxford: Berghahn, 124–168.
- Hofmann, B., Shim, I., Shin, H.S. (2020): Emerging market economy exchange rates and local currency bond markets amid the COVID-19 pandemic, BIS Bulletin No 5, April.

- Hölscher, J., Tomann, H. (eds) (2004): *Money, Development and Economic Transformation: Selected Essays*, London: Palgrave.
- IMF (2019): Global financial stability report, October, URL: <https://www.imf.org/en/Publications/GFSR/Issues/2019/10/01/global-financial-stability-report-october-2019>.
- Kaltenbrunner, A. (2015): A post Keynesian framework of exchange rate determination: a Minskyan approach, in: *Journal of Post Keynesian Economics*, 38, 426–448.
- Kaltenbrunner, A., Painera, J.P. (2017): Subordinated financial integration and financialisation in emerging capitalist economies: the Brazilian experience, in: *New Political Economy*, 23(3), 290–3013, doi: <https://doi.org/10.1080/13563467.2017.1349089>.
- Lane, P.R., Milesi-Ferretti, G.M. (2017): International financial integration in the aftermath of the global financial crisis, IMF Working Paper WP/17/115, May.
- Lensink, R., Morrissey, O. (2006): Foreign direct investment: flows, volatility, and the impact on growth, in: *Review of International Economics*, 14(3), 478–493, doi: 10.1111/j.1467-9396.2006.00632.x.
- Lüken gen Kläßen, M. (1993): *Währungskonkurrenz und Protektion. Peripherisierung und ihre Überwindung aus geldwirtschaftlicher Sicht, Studien zur monetären Ökonomie*, Band 12, Marburg: Metropolis Verlag.
- McKinsey Global Institute (2017): *The New Dynamics of Financial Globalization*, Washington, DC: McKinsey Global Institute.
- Minsky, H. (1982): *Can 'It' Happen Again?*, Armonk, NY: M.E. Sharpe.
- Minsky, H. (1986): *Stabilizing an Unstable Economy*, New Haven, CT: Yale University Press.
- Nicolas, A. (1995): *Geldverfassung und Entwicklung in Lateinamerika*, Band 16, Marburg: Metropolis Verlag.
- Nitsch, M. (1995): Economic theory and Latin American external debt, in: Liehr, R. (ed.), *La deuda pública en América Latina en perspectiva histórica (The Public Debt in Latin America in Historical Perspective)*, Frankfurt am Main: Vervuert and Madrid: Iberoamericana, S47–73.
- Nitsch, M. (1999): Vom Nutzen des monetär-keynesianischen Ansatzes für Entwicklungstheorie und -politik, in: Schubert, R. (ed.), *Neue Wachstums- und Außenhandelstheorie*, Berlin: Duncker & Humblot, 183–214.
- Nurkse, R. (1953): *Problems of Capital Formation in Underdeveloped Countries*, New York: Oxford University Press.
- Ocampo, J.A. (2001): International asymmetries and the design of the international financial system, CEPAL Serie Temas de Coyuntura No 15, Santiago de Chile: CEPAL.
- OECD (2020): Covid-19 and global capital flows, URL: [https://read.oecd-ilibrary.org/view/?ref=134\\_134881-twep75dnkt&title=COVID-19-and-global-capital-flows](https://read.oecd-ilibrary.org/view/?ref=134_134881-twep75dnkt&title=COVID-19-and-global-capital-flows) (accessed 13 August 2020).
- Paula, L.F., Fritz, B., Prates, D. (2017): Keynes at the periphery: currency hierarchy and challenges for economic policy in emerging economies, in: *Journal of Post Keynesian Economics*, 40(2), 183–202, URL: <https://doi.org/10.1080/01603477.2016.1252267>.
- Prasad, E., Rogoff, K., Wei, S., Kose, M. (2003): Effects of financial globalization on developing countries: some empirical evidence, Occasional Papers of the International Monetary Fund.
- Ramos, R.A. (2019): A Minskyan account of emerging currencies dynamics, in: *Journal of Post Keynesian Economics*, 42(4), 638–661, URL: <https://doi.org/10.1080/01603477.2019.1640066>.
- Riese, H. (1986 [2004]): Entwicklungsstrategie und ökonomische Theorie: Anmerkungen zu einem vernachlässigten Thema, in: de Gijsel, P., Gerlach, K., Glombowski, J., Haslinger, F. (eds), *Ökonomie und Gesellschaft, Jahrbuch 4: Entwicklungsländer und Weltmarkt*, Frankfurt am Main and New York: Campus, 157–196. (Translated as: Riese, H. (2004): Development strategy and economic theory: comments on a neglected topic, in: Hölscher, J., Tomann, H. (eds), *Money, Development and Economic Transformation: Selected Essays*, London: Palgrave, 84–113.)
- Riese, H. (1992 [2004]): Transformationsprozess und Stabilisierungspolitik, in: Gahlen, B., Heise, H., Ramser, H.-J. (eds), *Von der Plan- zur Marktwirtschaft: Eine Zwischenbilanz, Schriften des Wirtschaftswissenschaftlichen Seminars Ottobeuren*, Band 21, Tübingen: Mohr Siebeck, 139–152. (Translated as: Riese, H. (2004): The process of transformation and stabilization policy, in: Hölscher, J., Tomann, H. (eds), *Money, Development and Economic Transformation. Selected Essays*, London: Palgrave, 127–143.)

- Riese, H. (1993 [2004]): Bausteine einer Makrotheorie der Transformation, in: Herr, H., Westphal, A. (eds): *Transformation in Mittel- und Osteuropa: Makroökonomische Konzepte mit zwölf Fallstudien*, Frankfurt am Main and New York: Campus, 109–141.
- Riese, H. (1997): Stabilität und Entwicklung: Anmerkungen zur Integration der Dritten Welt in die Weltwirtschaft, in: Braig, M., Ferdinand, U., Zapata, M. (eds), *Begegnungen und Einmischungen: Festschrift für Renate Rott zum 60. Geburtstag*, Stuttgart: Akademischer Verlag, S81–108.
- Sachs, J.D. (1985): External debt and macroeconomic performance in Latin America and East Asia, in: *Brookings Papers on Economic Activity*, 16(2), 523–573, URL: <https://econpapers.repec.org/RePEc:bin:bpeajo:v:16:y:1985:i:1985-2:p:523-573>.
- Schellke, W. (1994): *Constitution and Erosion of a Monetary Economy: Problems of India's Development Since Independence*, 1st edn, London: Routledge, URL: <https://doi.org/10.4324/9780203988626>.
- Stiglitz, J., Ocampo, J.A. (eds) (2008): *Capital Market Liberalization and Development*, Oxford and New York: Oxford University Press.
- Studart, R. (2006): Integrating uneven partners: the destabilizing effects of financial liberalization and internationalization of Latin American economies, in: Vernengo, M. (ed.), *Money Integration and Dollarization*, Cheltenham, UK and Northampton, MA: Edward Elgar Publishing, 176–196.
- UNCTAD (2019): Managing capital inflows to reduce resource transfer from developing to developed countries, Policy Brief No 17, December.
- Wheatly, J. (2020): Fundamentals matter again for emerging market investors, in: *Financial Times*, 26 August.
- World Bank (2001): Finance for growth: policy choices in a volatile world, World Bank Research Report, Washington, DC/Oxford University Press.