

Herr, Hansjörg; Nettekoven, Zeynep

**Article**

## Currency hierarchy and underdevelopment

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

**Provided in Cooperation with:**

Edward Elgar Publishing

*Suggested Citation:* Herr, Hansjörg; Nettekoven, Zeynep (2022) : Currency hierarchy and underdevelopment, European Journal of Economics and Economic Policies: Intervention (EJEEP), ISSN 2052-7772, Edward Elgar Publishing, Cheltenham, Vol. 19, Iss. 2, pp. 238-259, <https://doi.org/10.4337/ejeep.2022.02.06>

This Version is available at:

<https://hdl.handle.net/10419/277548>

**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 underdevelopment\*

Hansjörg Herr

Professor Dr Emeritus, Berlin School of Economics and Law, Institute for International Political Economy (IPE), Germany

Zeynep Nettekoven

Dr, Lecturer of Economics, Europäische Akademie der Arbeit, Universität Frankfurt am Main, Germany

*Money in capitalism is a social force which exists not only on the level of wealth owners, but is also a force which stimulates economic development (or fails to do so). According to Hajo Riese the asset-protecting function of money, which can be expressed in a liquidity premium, indicates different qualities of money. At the top of the hierarchy are a small number of currencies which take over national and international functions; at the bottom are currencies which only partly take over national functions. Countries issuing these currencies suffer from dollarisation and capital flight. The consequence is that they cannot have a strong and sustainable Schumpeterian credit–investment mechanism. External credit seems to be a solution, but external debt together with credit dollarisation leads to a fragile domestic financial system and the likelihood of overindebtedness. A poor quality of money is one key element in explaining the reproduction of underdevelopment.*

**Keywords:** currency hierarchy, dollarisation, underdevelopment

**JEL codes:** E42, F63, O16

## 1 INTRODUCTION

There are about 160 currencies in the world. But these currencies perform fundamentally different functions. There are currencies which take over more or less all national functions of money but do not play an important international role. Examples are the Canadian and Australian dollar or the Danish krone. And there are a handful of currencies which fulfil national and international functions. As soon as cross-border activities are related to money it must be decided which money to use for denominating the price of products or services, in which currency the products or services have to be paid, and, especially importantly, in which currencies cross-border credits have to be given. In the last case the currency of the creditor, the debtor, or a third currency can be used. And wealth owners (households, firms, financial institutions, governments, etc.) have to decide in which currency they prefer to keep their monetary wealth. There are currencies which play no international role and at the same time perform only partly domestic monetary functions. This implies that domestic monetary wealth is partly held in foreign currencies in the form of cash or domestic foreign-currency deposits. In the latter case we speak about deposit dollarisation which includes domestic foreign-currency deposits in euros or other foreign currencies. In addition, domestic credits are given in foreign currency. For example, a domestic bank gives a credit in US

\* For many helpful comments we thank Barbara Fritz and Daniela Magalhaes Prates.

Received 3 March 2022, accepted 11 May 2022

dollars or euros. Here we speak about credit dollarisation. Moreover, domestic wealth owners can keep monetary wealth in foreign currencies in foreign countries. The currencies which replace domestic currencies to different degrees are in almost all cases also the currencies which perform international functions. Many currencies in the world suffer from crowding out by foreign currencies, while some of them perform only rudimentary monetary functions, for example in retail trade (see the examples in Table 2). But even if dollarisation is low, for example because it is not allowed or restricted, countries may have to offer relatively high interest rates to prevent capital flight.

This debate leads to the conclusion that the role of a currency is not defined by the territory of the state which issues the currency. There are currencies with a high quality at the top of the currency hierarchy which expand their functions far beyond their national boundaries. These currencies take over international functions, but also national functions in countries with currencies with a low quality (cf. for example Cohen 1998). Post-Keynesians have analysed the quality of different currencies as well as the hierarchy of currencies by introducing the concept of different liquidity premiums (or currency premiums) of currencies (Herr 1992: 117ff; Herr/Hübner 2005: 113ff; Fritz et al. 2018; for an overview see Bonizzi et al. 2021). The liquidity premium is a non-pecuniary rate of return which goes back to John Maynard Keynes (1936: ch. 17).

The place of a national currency in the hierarchy of currencies plays a central role for the development chances of the country issuing the currency. The main hypothesis of this paper is that a low quality of currency reduces the chances for development of the country issuing the currency. Low quality of currency and underdevelopment are in many cases mutually dependent. Of course, there are a number of other factors which make catching up difficult (Herr 2018), for example high income inequality (Ostry 2015) or dependencies in global value chains (Teipen et al. 2022). But the low quality of the national currency is an important factor that makes domestic catching up difficult. The main explanation is that a poor quality of currency makes a Schumpeterian credit–investment–income mechanism much more difficult as it leads to distorted domestic financial markets and fragile and dependent integration in global financial markets. In addition, countries with low-quality currencies are typically affected by higher exchange-rate volatility and smaller room to stabilise the economy via monetary and fiscal policy (Fritz et al. 2018).

Hajo Riese (2001: 472f) exactly discusses these points. He argues that acceptance of money by economic agents, meaning the use of money for holding wealth and making monetary contracts, is key for anything that fulfils the function of money. A precondition for the acceptance of money is its scarcity. But money is not money. The different levels of acceptance (or non-acceptance) of different moneys are the reason that many ‘developing countries, but in the present situation also many transition countries which integrate themselves from planned economies in monetary economies, do not catch-up with developed industrial countries’ (ibid.: 473, own translation). Developing countries fail to enthrone own money as ‘a scarce thing without own value and therefore the use of their own money for monetary contracts’ (ibid.: 484, own translation). Riese (2001) argues that the acceptance of a money is linked to the scarcity of money, whereas the scarcity is established and defended by the central bank. However, scarcity is not enough to trigger development. A central bank in a developing country can keep its money scarce and stable via high interest rates. The result may be a long-term stagnating economy (see the debate below). The expression *quality of a currency* covers all dimensions which make a currency attractive or not attractive for small and big wealth owners.

In Section 2, a short overview is given of what determines the quality of a currency. It is followed in Section 3 by an explanation of why a low quality of currency reduces

the room for a credit–investment mechanism and in this way reduces development chances. To overcome this problem with credit in foreign currency is a double-edged sword. Short case studies to strengthen the theoretical arguments are presented in Section 4. Section 5 concludes.

## 2 THE CURRENCY HIERARCHY

Karl Marx was one of the first economists to understand the special role of money and why economic agents are eager to hold this very special asset. Marx (1867 [1983]: 37) argued that there are lions, tigers and hares, and many other animals. And there is the abstract term ‘animal’; of course, the animal as such is not running around. Different use values such as tables, houses or cars exist as different forms of wealth. In contrast to the term ‘animal’, an incarnation of all these use values became reality. Money is the ‘absolute social materialization of wealth as such’ (Marx 1867 [1976]: 242). It is no surprise that there is a desire to hold money because of this character of it. It can be easily and quickly transformed into all kinds of goods. And the owner of money benefits from the social power money has, on the basis of its economic functions.<sup>1</sup> Keynes (1937: 215f) argues that, besides other functions, money ‘is a store of wealth. ... The procession of actual money lulls our disquietude; and the premium which we require to make us part with money is the measure of our degree of our disquietude’. Riese (1986) argues that money has an *asset-protecting function* and that the extent of money to be able to take over this function is expressed in a liquidity premium.<sup>2</sup> It is obvious that different currencies have different asset-protecting qualities expressed in different liquidity premiums which express in non-pecuniary rates of return the advantage in the eyes of wealth owners to hold a certain currency. Different levels of the liquidity premium functions of different currencies create a currency hierarchy with the currencies with the highest liquidity premiums at the top (cf. also De Paula et al. 2017; De Conti/Prates 2018).

It should be obvious that the money which takes over an asset-protecting function must be stable. In the centre is the stability of money as a unit of account. Holding money which is not stable cannot protect its holder from uncertainties which are part of human life, but are also created by the instabilities of a monetary economy. In modern economies the hoarding of cash, for example in foreign currencies especially in countries issuing low-quality currencies, is possible, but it is an exception. Wealth which lulls our disquietude is in most cases kept in the form of bank deposits or other short-term credit claims of different maturity, for example in short-term debt securities with fluid secondary markets. Wealth owners will be reluctant to hold liquidity in unstable currencies. The hierarchy of currencies can be expressed in the different levels of the liquidity premiums of currencies, whereas the

1. There are countless quotes by famous writers characterising money. Two shall be mentioned: ‘A thousand ships land and go; there is every costly thing to see, and the Earthgod rules, money’ (Friedrich Schiller 2022). ‘When I was young, I thought that money was the most important thing in life. Now that I am old, I know that it is’ (Oscar Wilde 2022).

2. ‘Der Verlust der Geldfunktion als Wertaufbewahrungsmittel ist dabei als Verlust seine Vermögenssicherungsfunktion zu interpretieren. Sein preistheoretischer Ausdruck ist das Sinken der Liquiditätsprämie’ (‘The loss of monetary function as a store of value is here interpreted as the loss of the asset-protecting function. Its price-theoretical manifestation is the reduction of the liquidity premium’) (Riese 1986: 218).

marginal liquidity premiums are decreasing with the quantity of monetary wealth held in a currency. The concept of a liquidity premium can be transferred to credits given in different currencies (Bonizzi/Kaltenbrunner 2021). Wealth owners will be reluctant to give credit in currencies with low qualities, and especially to give long-term credits. And when they give credits at all they will ask for relatively high interest rates. For credits we can introduce a risk premium which is determined by the quality of a currency and is a version of the liquidity premium introduced above.

Stability of a currency can be measured in a basket of goods. But it can also be measured vis-à-vis other currencies. Different currencies stand in competition to each other. Some have a higher quality measured in their level of the liquidity premium than others, and a hierarchy of currencies is created. If wealth owners are free to choose in which currency to hold their wealth, competition between currencies will be very intensive. Strict international capital controls and regulations of financial markets reduce the competition between currencies. In the present era of financialisation, with almost a global financial market and a relatively low level of capital controls currency, competition must be judged as very intensive.

Relative stability can be considered, as mentioned, as a precondition of a high-quality currency. But relative stability does not automatically lead to an international role for a currency. A good example is Switzerland, which comparatively has a very stable currency, but performs limited international functions. Three points are especially important for a stable currency to perform an important international role, and there is a broad consensus in the literature about the first two (for an overview, see Herr/Nettekoven 2021).

Firstly, the relative economic size of a country issuing a currency is important, and here especially the relative size of gross domestic product (GDP), relative international trade shares, diversification of the trade structure, and centrality in global trade networks are important. The relative size of the financial market of the country, meaning a deep, broad, liquid and resilient financial system, plays a key role as well. Size factors lead, comparably with the use of a language, to economies of scale in terms of decreasing transaction costs; and they increase the liquidity character of a currency (Kindleberger 1967; Chinn/Frankel 2005).

Secondly, certain institutional preconditions, such as a liberalised financial market in the country issuing the currency, are important. Without free cross-border capital flows a currency can hardly take over comprehensive international functions. Relevant institutional factors also include the existence of the rule of law (Bergsten 2009). All presently existing currencies are established and issued by states, as predicted by Knapp (1905). This implies that central banks issue national currencies and are responsible for policies to keep their currencies stable. In addition, they play an essential role as market-maker and in stabilising the financial system by taking over the function of lender of last resort.<sup>3</sup>

Thirdly, geopolitical factors are important as well. To play a leading international role, the currency-issuing country must provide a safe haven which implies political and military power. If an economically and militarily powerful country which could not pay its debt faced conditions imposed by a weaker country, the powerful country would probably be unable to fulfil these conditions. In such a constellation it is likely that the strong

3. At least until now, crypto currencies like bitcoin perform only very limited monetary functions. These 'currencies' are very unstable and cannot fulfil the asset-protecting function of money. And they are not used as units of account for credit contracts, not only because they are unstable, but also because there is no institution which could stabilise a credit system built on them.

country does not fulfil imposed conditions and does not pay back debt (Cohen 1998; Hel-leiner 2008). Before World War I militarised debt collection in many cases via gunboats was a well-accepted practice (Tomz 2008: ch. 6). Today more subtle policies were used which are nevertheless powerful.

Table 1 shows that today the US dollar is clearly at the top of the current hierarchy of currencies, but with a tendency to lose importance. The euro follows as the second-most important currency, but cannot challenge the leading role of the US dollar. Other currencies play a relatively small role. The Chinese renminbi has started to assume international functions, however on a very low level. The summarising index of the international role of currencies shows that the market share of the US dollar dropped from 73.4 per cent in 2001 to 66.6 per cent in 2020. The share of the euro, with 24.3 per cent in 2020, was almost stable. The share of the yen dropped in 2020 to 8.5 per cent and of the British pound to 8.5 per cent. The renminbi had in 2020 a share of 2.1 per cent (Bertaut et al. 2021).

At the bottom of the currency hierarchy, currencies perform only part of domestic monetary functions. Comprehensive actual data about dollarisation is scarce. In a publication by the International Monetary Fund (IMF), data for 2015 is available (Bannister et al. 2018: 31). Deposit dollarisation is defined as total foreign-currency deposits as a share of total broad money, and credit dollarisation as domestic foreign-currency loans over total domestic loans. Covering 77 countries, the main results are as follows. Deposit dollarisation for all countries in the world, from the mid 1990s until 2015 with some variations, was around 30 per cent. It was highest in peripheral European countries, followed by Latin America. It was lowest in the Middle East and North Africa. Credit dollarisation, with over 40 per cent from 2000 until 2015, was the highest again in European peripheral countries, followed by Latin American countries, which could reduce credit dollarisation to around 25 per cent. With 82 per cent, the correlation between deposit and credit dollarisation is high. Some countries have very high dollarisation, for example deposit dollarisation in Cambodia and Nicaragua is around 90 per cent, whereas other countries, such as China and Bangladesh in 2015, had deposit dollarisation of close to zero (Bannister et al. 2018: 10f).

Christiano et al. (2021) calculated average dollarisation between 2010 and 2019 for a number of countries (see Table 2). Deposit dollarisation in this country group reaches values from 67 per cent to 16 per cent. It is also shown that households keep usually the bigger part of domestic foreign-currency deposits, exceptions being for example Russia or Mozambique. In a number of countries private households' credit taken from local banks in foreign currency is high, for example in Armenia and Romania. In a number of countries foreign domestic currency loans by domestic banks are legally restricted and very low or zero. In Turkey, for example, households are not allowed to get foreign-currency credits from domestic banks. Foreign-currency credits by enterprises are high in a number of countries and exceed substantially the volume of foreign-currency deposits. In this case domestic banks must take credits in foreign currency abroad and transfer the funds via capital imports in the domestic economy.

As the data has shown, dollarisation in many countries is high. Not included is the hoarding of foreign banknotes in countries with low-quality currencies. For the United States alone it is estimated that in 2020 around 50 per cent of US dollar banknotes circulated outside the country, around 950 billion or 4.5 per cent of US GDP in 2020 (Bertaut et al. 2021). More important is that deposit dollarisation is usually the 'capital flight' of the small wealth owner. Big wealth owners keep substantial parts of their wealth in foreign currency abroad. Concrete figures do not exist. The implication is that in many countries issuing low-quality currencies very large parts of monetary wealth are kept in foreign currency, inside the country or outside.

Table 1 International role of currencies: global market shares in per cent

	1999				2021							
	US dollar	Euro Yen	British pound	Renminbi Others	US dollar	Euro Yen	British pound	Renminbi Others				
Official foreign-exchange reserves	71.0	17.9	6.4	2.9	-	1.8	59.5	20.6	5.9	4.7	2.8	6.8
International banking claims	55.5	20.0	9.2	5.4	-	10.0	60.8	19.3	3.8	4.4	-	11.7
International banking liabilities	51.6	18.2	16.0	4.9	-	10.0	57.0	23.0	5.4	5.4	-	11.7
International debt securities	74.9	15.0	2.9	4.7	-	2.5	63.9	23.9	2.9	3.7	1.4	4.2
Over-the-counter foreign-exchange transactions <sup>a</sup>	-	-	-	-	-	-	88.0	32.0	17.0	13.0	4.0	46.0
Index of international currency usage <sup>b</sup>	73.4	22.8	10.1	6.9	-	-	66.6	24.3	8.5	6.6	2.1	-

Note: a. Total is 200 per cent. b. 2001 and 2020.

Source: Survey by Board of Governors of the Federal Reserve; Bertaut et al. (2021).

Table 2 Dollarisation<sup>a</sup> (average values 2010–2019) and domestic credit to private sector in 2020

Country	Dollar deposits as % of total deposits	Household dollar deposits as % of total foreign-currency deposits	Household dollar borrowing from domestic banks as % of total dollar deposits	Firm total dollar domestic borrowing as % of total dollar deposits	Domestic credit to private sector as % of GDP	Real interest rates, domestic lending rates adjusted with GDP deflator
Croatia	67	–	0	16	59.8	8.4***
Armenia	59	74	31	107	72.2	9.4
Kazakhstan	52	66	15	193	25.6	–
Albania	51	86	15	47	38.6	6.6
Peru	48	–	17	101	55.1	8.4
Ukraine	44	64	13	126	28.4	4.1
Bulgaria	41	–	17	53	51.7	0.1****
Uganda	36	–	2	64	14.2	14.7****
Turkey	36	57	0	106	75.1	–1.8
Romania	34	72	77	76	26.1	2.6
Russia	31	45	2	109	60.0	5.8
Mozambique	30	32	3	54	24.8	14.2
Honduras	29	54	19	87	69.8	11.8
Egypt	22	66	1	51	27.1	4.8
Hungary	21	38	43	143	38.3	–3.7
Low income	–	–	–	–	12.6**	15.3
Lower middle income	–	–	–	–	46.9	4.4
Upper middle income	–	–	–	–	143.6	7.42
High income	–	–	–	–	164.7	2.3 (only USA)****

Notes: a. The dollar represents all foreign currencies. \*\* 2015; \*\*\* 2014; \*\*\*\* 2018; \*\*\*\*\* for the group of high-income countries no real lending interest rate is available.

Sources: For dollarisation measures, Christiano et al. (2021: A-10); for credit ratios and real interest rates for single countries, World Bank (2022); for real interest rates for country groups, The Global Economy (2022); for Turkey, the real interest rate is self-calculated based on the nominal interest rate on commercial credit (CBRT 2022a) adjusted for inflation measured by the GDP deflator (World Bank 2022).



### 3 THE SUPPRESSED SCHUMPETERIAN CREDIT-INVESTMENT MECHANISM AND ITS CONSEQUENCES

Like no other economist Schumpeter stressed that the economic dynamic in capitalist economies is closely linked with credit expansion whereas credit is not based on savings. For Schumpeter (1911 [1949]: 107) the 'kernel' to understanding the economic dynamic is: 'Credit is essentially the creation of purchasing power for the purpose of transferring it to the entrepreneur, but not simply the transfer of existing purchasing power. ... Granting credit in this sense operates as an order on the economic system to accommodate itself to the purpose of the entrepreneur'. And credit is created 'ad hoc' (ibid.: 106). The banking system, backed by refinancing of the central bank, creates credits which allow firms to have net investment beyond undistributed profits or the issuance of new shares. If investment increases, demand for goods goes up, employment increases, income is created, and finally savings occur. Higher income leads to additional consumption demand, which again triggers additional employment, production and income, etc. Higher GDP-growth rates which are linked to higher investment lead endogenously to higher productivity increases; as with new machines, etc., new technology is embedded, learning processes are strengthened, or synergies are created. Overall, a process of economic development is triggered. It is obvious that credit expansion can flow in the wrong sectors with the consequence of over-indebtedness. This is especially the case if credit expansion finances real-estate bubbles and other speculations, or too much consumption is financed by credit.

The above sketched capitalist expansion model driven by credit and investment does automatically lead to increasing monetary wealth. Any credit given by a bank not only increases the asset side of its balance sheet, but also the liability side. If parts of deposits are exchanged in cash, the bank has to get refinancing from the central bank, whereas the increase of monetary wealth remains unaffected. In a stable expansion process, the private sector holds the additional monetary wealth in the form of cash, demand or time deposits, debt securities, etc. Most importantly, additional monetary wealth is only to a minor part, if present at all, exchanged in foreign currency.

But this is exactly where the problem lies for a typical country with a low-quality currency (Fritz et al. 2018). In Table 2 it is shown that in countries with low-quality currencies dollarisation can be over 30 per cent, over 50 per cent, or even higher. Even if dollarisation is relatively low, capital flight and the holding of monetary wealth in a foreign currency in foreign countries can be high. These percentages show the strong preference of private wealth owners in countries with a low quality of currencies to hold a large part of their monetary wealth or even most of it in a foreign currency. We must assume that the existing portfolio preferences will remain the same when the stock of monetary wealth increases. Any additional credit in domestic currency by the commercial banking system leads to the extension of the balance sheet of banks in the domestic currency. Usually, the bank gives a credit to an economic unit by increasing the deposit of this unit according to the credit sum. This additional deposit will be used to buy goods and services, to pay wages, etc. Part of the additionally created deposit will lead to cash withdrawals – in this case the banking system will have to get refinanced by the central bank. In short, the additional monetary wealth created by additional credit will, independent of which bank has given the credit and what the purpose of it, flow to wealth owners who exchange a large part of it in foreign currency.

As a consequence, credit expansion quickly creates massive pressures on the exchange rate. Substantial depreciations will have a number of severe negative effects for a typical country with a low-quality currency: Firstly, an inflationary push is triggered via higher import prices with the danger of a depreciation–wage–price spiral. Secondly, in case of

real depreciation the real debt burden for credits denominated in foreign currency increases.<sup>4</sup> For example, in 18 researched cases between 1998 and 2013 with debt in foreign currency a real depreciation triggered a sovereign debt default (Asonuma 2016). Thirdly, very low elasticities of export and import can lead to higher current-account deficits in case of depreciation.<sup>5</sup> Fourthly, a real depreciation reduces real domestic income at least in the short term. If this massively affects poor people or the consumption patterns of the middle class in a country, social unrest and political instability can result. In short: a credit expansion in domestic currency in countries with low-quality currencies leads quickly to strong nominal depreciation which can lead to inflationary spirals or real depreciations. In both cases destabilising processes are started which lead to the erosion of the monetary system via inflation or financial crisis. The central bank has to follow policies to stabilise the exchange and has to switch to restrictive monetary policy which chokes off investment and development. Or, as is more likely, the central bank in anticipation of the development will not allow strong credit expansion in domestic currency from the beginning. *The poor quality of the national currency becomes a barrier to follow a stable and sustainable credit–investment–income process to develop and catch up.*

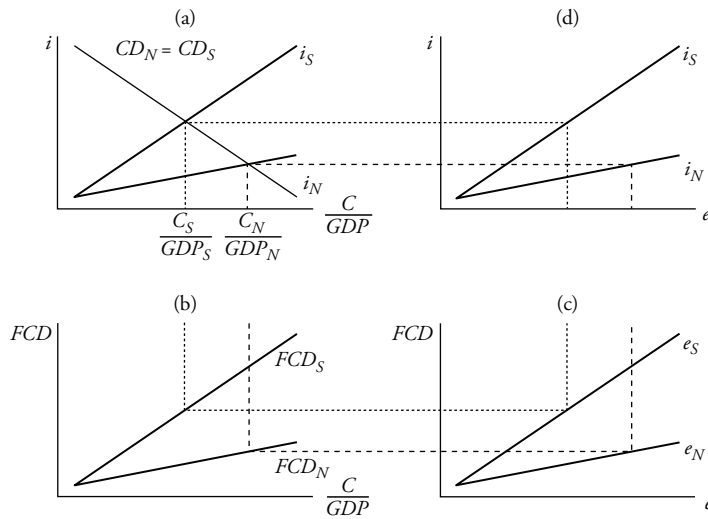
Real depreciations may be necessary for a country with high current-account deficits to achieve external equilibrium. They will, if the Marshall–Lerner condition is fulfilled, also stimulate exports, reduce imports and stimulate domestic production and income creation.<sup>6</sup> However, these positive effects of a real depreciation take time, do not avoid a debt crisis in case of high foreign debt, and can lead to political destabilisation because of short-term negative real income effects. Also, in the short term, depreciations most likely lead to a further erosion of the quality of a currency. The result of all these factors is that in spite of long-term potential positive effects of real depreciations, governments and central banks in many cases shy away from strong real depreciations and try to defend the stability of the exchange rate.

Figure 1 makes the argumentation clear. CD stands for credit demand to GDP. We assume that credit demand increases with a falling domestic interest rate ( $i$ ) and that this is also the case for credit demand to GDP. Many other factors like expectations of firms or government support for investment also play a role in credit demand. All these other factors are kept constant. The credit-demand-to-GDP function looks then:  $CD = CD(i, \dots)$ . For a typical country from the Global North with a relatively high quality of currency we use the subscript ' $N$ ', and for a typical country from the Global South with a relatively poor quality of its currency we use the subscript ' $S$ '. For simplification, it is assumed that the demand function for credit to GDP is the same for the country with a high quality of currency and the country with a low quality of currency. The function is shown in the quadrant (a).

4. Real debt burden ( $D_r$ ) in case of foreign debt is defined as  $D_r = FD \cdot e/P_D$ , with  $FD$  as foreign debt and  $P_D$  domestic price index. Let us make an example for the Turkish Lira (TL). We assume  $D_r = (\$1000 \cdot \text{TL}15/\$1) / 1 = \text{TL}15\,000$ . Now the exchange rate and the domestic price level double. We get  $D_r = (\$1000 \cdot \text{TL}30/\$1) / 2 = \text{TL}15\,000$ . Of course, different economic units may be differently affected in case their price index is different from the general price index. If in the example the exchange rate doubles and the domestic price level does not change, the real debt burden doubles.

5. The Marshall–Lerner condition may not be fulfilled, at least in the short term. A depreciation only increases the balance of goods and services if the absolute sum of a country's export and import demand elasticities, that is, the demand responsiveness to price changes, is greater than one.

6. If the Marshall–Lerner condition does not hold, a market failure exists. In such a case, direct regulations of trade flows are necessary.



Notes:  $C$  = stock of credit;  $CD$  = credit demand to GDP;  $i$  = interest rate;  $FCD$  = foreign-currency demand;  $e$  = exchange rate;  $_N$  = typical country from Global North with high-quality currency;  $_S$  = typical country from Global North with low-quality currency.

Figure 1 Credit volume in domestic currency and interest rates in countries with different currency qualities

Credit expansion increases monetary wealth. How much of the additional monetary wealth is exchanged in foreign currency depends on the quality of the domestic currency in the eye of wealth owners expressed in a liquidity premium ( $l$ ). In addition, falling domestic interest rates stimulate capital exports. The foreign-currency demand ( $FCD$ ) for our purpose looks then:  $FCD = FCD(C/GDP, i, l, \dots)$ ; it depends on credit to GDP, the interest rate, and the level and development of the liquidity premium. Increasing credit to GDP (respectively monetary wealth to GDP) increases demand for foreign currency. Decreasing interest rates support this effect. How strong demand for foreign currency increases when credit to GDP increases depends on the level and development of the liquidity premium. In a country in the Global North demand for foreign currency will only increase moderately with increasing credit to GDP. For a typical country in the Global South the level of the liquidity premium is relatively low and will fall quickly with an increasing stock of wealth in domestic currency. This, together with decreasing interest rates, leads to a high demand for foreign currency when domestic credit to GDP increases (see quadrant (b)).

The higher is foreign-currency demand, the higher will be the exchange rate ( $e$ ), signaling a depreciation of the domestic currency. Other factors influencing foreign-currency demand are kept unchanged, and so we get  $e = e(FCD, \dots)$ ; see quadrant (c).

Finally, we assume that, following the arguments above, the central bank must react to the depreciation pressure with increasing interest rates. It follows in quadrant (c) as monetary policy reaction function  $i = i(e)$ . The central bank with a low-quality currency is in case of increasing credit to GDP confronted with strong depreciation pressure and reacts with strong interest rate increases, for the country with a high-quality currency

depreciation pressure in case of credit expansion almost does not exist. If we shift the monetary policy reaction function to quadrant (a) we get as a result that the country from the Global North can afford a higher credit–GDP ratio ( $C_N/GDP_N$ ) than the country from the Global South with the low-quality currency ( $C_S/GDP_S$ ). At the same time the interest rate in the country issuing the low-quality currency is higher.

We do not argue that there may not also exist other reasons for the combination of relatively low credit to GDP and relatively high interest rates in less developed countries, but we want to stress that the low quality of their currencies is, in itself, an important reason for this combination which is so development-unfriendly. The outcomes from Figure 1 fit very well with the empirical constellation shown in Table 2. In 2020 low-income countries had a ratio of domestic credit to the private sector to GDP of 12.6 per cent, lower-middle-income countries of 46.9 per cent, upper-middle-income countries of 143.6 per cent and high-income countries of 164.7 per cent. At the same time real lending rates in low-income countries were 15.3 per cent, in lower-middle-income countries 4.4 per cent, in upper-middle-income countries 7.4 per cent, and in the USA 2.3 per cent.<sup>7</sup> And it has to be seen that in countries with a relatively low quality of currencies a large part of domestic credit is given in foreign currency. As examples, in Table 4 it is shown that between 2011 and 2020 in Georgia 62 per cent, in Turkey 39 per cent and in Uganda 29 per cent of all domestic loans were given in foreign currency.

The analysis above supports the argument by Riese (1986) that capital flows are driven by two targets of wealth owners, to earn a pecuniary rate of return and to protect the asset owned, whereas for the last target the quality of a currency play a key role. Thus, capital flows are not simply the result of interest-rate differentials.<sup>8</sup> The poor asset-protection quality of a currency triggers flight in domestic foreign-currency deposits and foreign bank notes as well as wealth kept abroad. The outcome is a combination of relatively low credit expansion and relatively high real interest rates in countries issuing low-quality currencies. Beyond this structural long-term feature, international capital flows have a cyclical nature. As in all financial markets boom phases give way to bust phases. A period of high capital inflows in a country typically ends with a stop to capital inflows and can even give way to high capital outflows and financial crisis (Minsky 2008).

This leads us to the next question: can capital inflows overcome the problem of restricted credit expansion in domestic currency in a typical country in the Global South? At first glance the answer is yes. If a country finances domestic investment, government expenditure, or even consumption with foreign credit, credits available in the country increase. Or domestic credit expansion in domestic currency which leads to higher dollarisation and capital outflows can be compensated by capital inflows to finance the additional

7. It has to be taken into account that in the averages of country groups are countries with disordered monetary systems with partly very high negative real interest rates, for example in 2020 in Zimbabwe, with a negative real interest rate of 79.8 per cent, in Venezuela with 16.5 per cent, in Suriname with 20.8 per cent, or in Somalia with 21.3 per cent (World Bank 2022). Also, Turkey had negative real interest rates (see Table 2). In the group of lower-middle-income countries for example, 13 countries had in 2020 real interest rates above 9 per cent, and in the group of upper-middle-income countries this was the case for ten countries (The Global Economy 2022).

8. 'Internationale Kapitalbewegungen werden keineswegs allein durch Zinssatzdifferenzen induziert. Vielmehr gilt gerade auch für sie das generelle präferenztheoretische Muster des Vermögensbesitzers, dass er eine doppelte Entscheidung trifft, indem er neben dem Zinsertrag eine Vermögenssicherung kalkuliert' ('International capital flows are in no way only induced by interest-rate differences. Much more importantly, the preferences of the asset owner apply for them, whereby he makes a double decision in which, in addition to interest, he calculates the asset protection') (Riese 1986: 237).

demand for foreign currency. For example, the government can take foreign loans to finance additional demand for foreign currency by domestic private wealth owners in periods of high credit expansion in domestic currency. Last not least, in boom phases capital inflows can be so high that additional demand for foreign currency by domestic wealth owners can easily be financed and even appreciation pressure of the domestic currency can become a problem. In Table 2 in a number of countries the sum of firms' and households' foreign-currency borrowing is much higher than foreign-currency deposits. This means that high capital inflows, mainly via banks, stimulated domestic credit expansion. In addition (big) firms and government can directly borrow abroad.

But foreign credit is a sweet poison. It leads to currency mismatch as liabilities become denominated in foreign currency while revenues and assets in many cases do not (Eichengreen et al. 2007). High foreign debt increases the fragility of the domestic financial sector – there is for example no lender of last resort for foreign credit – and increases the dependence on foreign creditors. The list of external overindebtedness and financial crisis after a period of capital inflows in countries issuing low-quality currencies is long. Externally triggered financial crises lead to severe disruption of economic development and potentially to long-term stagnation. Ari et al. (2020) give an overview of 88 banking crises in 78 countries from 1990 until 2020 and their disastrous effects.<sup>9</sup>

There is a second strategy to overcome the limited space of domestic credit expansion in countries with a low-quality currency. The country can prohibit dollarisation and strictly regulate international capital flows to reduce currency competition. If it, at the same time, keeps the inflation rate low and strictly avoids current-account deficit it can hope slowly to increase the quality of currency and achieve higher credit expansion in combination with low interest rates. China is a good example for this (Herr 2008).

#### 4 SELECTED COUNTRY CASES

Based on our theoretical approach to currency hierarchy and its macroeconomic consequences we look more closely into three typical countries with low-quality currencies, namely Georgia, Turkey and Uganda. These countries are on different levels of development, suffer from low-quality currencies, and seem especially instructive for clarifying our argument. The inter-relation between issuing a low-quality currency, narrow monetary policy space, and interrupted economic growth is highly visible in these countries. We also make a brief comparison of them with China and El Salvador, two extreme country cases in terms of sheltering their domestic financial system from currency competition. China has been following a state-permeated type of capitalism which especially stimulates investment demand, a big role for state-owned enterprises and banks, a strict policy to prevent current-account deficits, and an overall low inflation rate and stable exchange rate. Capital controls sheltered the renminbi from hard currency competition and allowed China to follow domestic-oriented monetary policy and economic policy in general (Nölke et al. 2020). However, in spite of the economic success and size of China in the world economy, the international role of the renminbi until now is low (see Table 1).<sup>10</sup> El Salvador, on

9. Foreign direct investment (FDI), which is at least not directly creating foreign debt, seems to be the solution. FDI in certain sectors and certain regulations can be helpful, but it is not sufficient to trigger development (for a debate, see Teipen et al. 2022).

10. China's share of global foreign-exchange turnover increased to around 4 per cent of a total of 200 per cent, being ranked as the eighth currency in this respect (BIS 2019), but this reflects mainly the size of the economy and its integration into international trade.

the other hand, switched to official dollarisation, adopted the US dollar as its national currency, and gave up all national monetary policy autonomy including the instrument of the exchange rate and the function of lender of last resort of its central bank.

Georgia, Turkey and Uganda all have flexible exchange-rate regimes with open financial accounts, whereby their domestic currencies are ranked at the bottom levels of the currency hierarchy. All three countries suffer from dollarisation and capital flight and a relatively high real interest rate and limited space for domestic credit expansion in their own currencies. Table 3 shows that Georgia, Turkey and Uganda have relatively low shares of domestic credit to GDP, whereas it has to be taken into account that part of these credits are in foreign currency. China succeeded in maintaining a disproportionately bigger space for domestic credit expansion and at the same time low real interest rates. Domestic credit in per cent of GDP in China has been by far the largest among developing countries, whereas not all the credit went in productive sectors. El Salvador, compared to Georgia or Turkey, shows that full dollarisation does not guarantee high credit expansion. In the case of El Salvador, it is striking that domestic credit to GDP have stagnated in the last 20 years (World Bank 2022).

China shows high and stable real economic growth, being above 8 per cent throughout the 2000s, before it slightly decreased in the 2010s. The possibility of stimulating domestic credit expansion in domestic currency must be considered as an important pillar of this Chinese success. In Georgia, Turkey and Uganda GDP growth rates have never been as stable or high as in China. Especially in the 2010s, growth was not sufficient to achieve substantial catching up with GDP-per-capita levels in developed countries. At 2–3 per cent, El Salvador had low economic growth rates in the 2010s.

Countries with low-quality currencies can take foreign credit as an alternative source for domestic credit expansion in domestic currency. External debt to gross national income (GNI) gives an indication of the extent to which this source was used. In Georgia, Turkey and Uganda external debt to GNI is relatively high, while in El Salvador it is very high (see Table 3). In China it is, at 16 per cent in 2020, relatively low (World Bank 2022). Because of the low quality of their currencies, foreign credit for all of these countries is mainly denominated in foreign currency and creates potentially high currency mismatch in the same way as credit dollarisation. Dollarisation in China is almost zero, whereas in the other countries it plays an important role for domestic credit.

#### 4.1 Georgia

By the Rose Revolution in 2003, a new government was formed and radical neoliberal structural reforms, along with privatisations and deregulations of domestic and international financial markets, were initiated. The IMF and the World Bank as well as foreign national agencies such as the United States Agency for International Development (USAID) and the German Society for International Cooperation (GTZ) supported these reform programmes with financial aid (Christophe 2007). Domestic credit to the private sector by banks as a percentage of GDP grew fast. During the global financial crisis of 2008–2009, credit expansion slowed down before increasing again, reaching 76.8 per cent of GDP in 2020. At the same time, real interest rates for bank loans were relatively high – in spite of the extremely low real interest rates in developed countries (World Bank 2022).

Domestic credit to a substantial extent was given in foreign currency. Deposit as well as credit dollarisation in Georgia have been high (Table 4). Foreign-currency deposits in total domestic deposits accelerated in the second half of the 1990s and early 2000s, reaching 86 per cent in 2003, which showed the growing distrust in the newly introduced lari in 1995, whereby the

Table 3 Selected indicators for China, El Salvador, Georgia, Turkey and Uganda

	Real GDP growth, %		Domestic credit, % of GDP		Real lending interest rate, %		External debt, % of gross national income	
	2001–2010	2011–2020	2001–2010	2011–2020	2001–2010	2011–2020	2001–2010	2011–2020
China	10.6	6.8	115.1	149.6	1.5	2.5	11.7	14.4
El Salvador	1.6	1.4	47.9	49.0	n.a.	n.a.	60.8	69.8
Georgia	6.4	3.6	19.0	50.1	10.7 <sup>a</sup>	7.4	52.7	98.2
Turkey	4.2	5.2	24.1	60.1	9.3 <sup>b</sup>	4.6	43.1	48.7
Uganda	7.4	5.1	9.1	12.3	9.6	16.6 <sup>c</sup>	38.2	31.3

Notes: a. 2003–2010 average. b. 2002–2010 average. c. 2011–2018 average. n.a. = not available.

Sources: World Bank (2022); for Turkey the real interest rate is self-calculated based on nominal interest rate on commercial credit (CBRT 2022a) adjusted for inflation measured by the GDP deflator (World Bank 2022).

*Table 4 Dollarisation in Georgia, Turkey and Uganda*

	Domestic foreign-currency loans, % of total domestic loans, average		Foreign-currency deposits, % of total deposits, average	
	2001–2010	2011–2020	2001–2010	2011–2020
Georgia	76.7 <sup>a</sup>	61.7	74.0	64.4
Turkey	14.3 <sup>b</sup>	28.9	n.a.	42.2 <sup>d</sup>
Uganda	24.8 <sup>c</sup>	39.3	29.2 <sup>e</sup>	35.5

*Notes:* a. 2004–2010 average. b. 2005–2010 average. c. 2007–2010 average. d. 2012–2020 average. e. 2002–2010 average. For Georgia and Uganda monthly averages; for Turkey annual average. n.a. = not available.

*Sources:* BoU (2021); NBG (2021); CBRT (2022a).

hyperinflation history in Georgia played a role (IMF 2021a). Deposit dollarisation from the periods 2004–2010 and 2011–2020 on average slightly decreased from 76.7 per cent to 61.7 per cent, but in 2021 were still 61 per cent of total domestic deposits (NBG 2021).

Correspondingly the weight of foreign-currency loans in total domestic loans in Georgia has been high. In 2003 these loans reached a value of 88 per cent of total loans (ibid.). Domestic credit expansion by banks in domestic currency is very low in Georgia and reached only 19 per cent of GDP in 2019 (ibid.; National Statistical Office Georgia 2021).

Such high deposit and credit dollarisation imply a high fragility of the domestic financial system as currency mismatch can quickly lead to an explosion of non-performing loans. The banking sector can run into liquidity problems when domestic foreign-currency deposits are transferred abroad and domestic banks have no sufficient reserves in foreign currency. The central bank can in such a case only take over the function as lender of last resort as long as it has foreign-currency reserves (IMF 2021a).

In 1999 the external debt of Georgia was 63 per cent of GNI, whereas 57 per cent of the total external debt belonged to the government. Including the share of monetary authorities in total external debt, public external debt was 74 per cent of the total external debt in 1999 (NBG 2021). After the Rose Revolution, based on debt relief external debt as a percentage of GNI decreased to 29.3 per cent in 2007. Then it started to increase again sharply to 81 per cent in 2009 and continued rising thereafter in most years, climbing to the extremely high level of 133 per cent in 2020 (World Bank 2022).

In the second half of the 2010s the share of banks, non-bank financial corporations and non-financial corporations in total external debt in Georgia was around three-fourths. Then the share of government, including the central bank, increased to 41.3 per cent of the total external debt in September 2021 (NBG 2021). The majority of the government's total debt (domestic and external) is in foreign currency, and in 2021 the share was 80 per cent. Yet most of the total external government debt is owed to international financial institutions, such as the IMF, at low interest rates (IMF 2021a).

After its introduction in 1995, the lari depreciated in nominal terms against the US dollar in the late 1990s and early 2000s, before appreciating moderately in the second half of the latter decade and then remaining relatively stable in the first half of the 2010s. From late 2014 onwards, the lari depreciated massively and the external value of the US dollar in this period almost doubled. The real effective exchange rate in this period also showed substantial depreciation (IMF 2022). This resulted in financing problems for many debtors in foreign currency in Georgia. For this reason, it is no surprise that Georgia had to ask for financial assistance from the IMF several times during the last decade, which could only be given under certain conditions required by the IMF.



## 4.2 Turkey

Turkey's history of currency crises marks the country as a typical case of a low-quality currency issuer with narrow monetary policy space, dependent on external finance and accumulating fragilities in boom phases with frequently interrupted economic growth (Herr/Sonat 2014). Despite increasing domestic credit to the private sector, for an upper-middle-income country such credit by banks comprised only 71 per cent of GDP in 2020 (World Bank 2022). The real lending interest rate in the period 2002–2010 was on average 9.3 per cent, then decreased to 4.6 per cent on average in the period 2011–2020 (see Table 3), a period of very low real interest rates in the US or the European Economic and Monetary Union.

Distrust in the Turkish lira (TL) due to the country's history of currency crises and high inflation led to high deposit dollarisation. In 2021 64 per cent of domestic deposits were in foreign currency, and domestic loans are partly in foreign currency as well. Comparing the period 2005–2010 with 2011–2020, the share of domestic foreign-currency loans in total domestic loans significantly increased from 14.3 per cent to 28.9 per cent (see Table 4). In 2021 credit dollarisation was 39 per cent of total domestic credits or 56.4 per cent of GDP (CBRT 2022a). This sharp increase in domestic foreign-currency credit can be attributed to two factors: firstly, the eased borrowing conditions for credits in foreign currency for the non-financial corporate sector by lifting the condition that only companies with foreign-exchange revenues or sufficient foreign-currency deposits are allowed to take foreign-currency credits; and, secondly, the sharp depreciation of the TL beginning in 2018. Only since 2018 has the government restricted foreign-currency loans again (Resmi Gazete 2009; 2018).

External debt as a percentage of GNI increased from the 2000s to the 2010s, reaching the high level of 61 per cent in 2020 (see Table 3; World Bank 2022). In the first half of the 2010s almost three-fourths of external debt in Turkey was taken by the private financial and non-financial sector. This share then gradually decreased to 52.8 per cent in 2021, showing an increase of public external borrowing (CBRT 2022a).<sup>11</sup>

External debt and loan dollarisation expose firms' as well as government balance sheets to real depreciation of the TL. According to calculations by the Central Bank of the Republic of Turkey foreign-exchange liabilities exceeding foreign-exchange assets of non-financial companies were growing from the second half of the 2000s until 2017, before narrowing down to some extent due to a decline in foreign-exchange liabilities. Despite this decline, net foreign-exchange liabilities in the non-financial corporate sector reached US\$115.5 billion or 30.5 per cent of GDP in November 2021 (CBRT 2021a; 2022a).<sup>12</sup> Added to this is the currency mismatch of financial institutions. There is a high danger of overindebtedness of firms indebted in foreign currency.

In the 2000s the exchange rate of the TL vis-à-vis the US dollar was almost stable, but started in the early 2010s to depreciate moderately. The bust phase after a relatively long boom phase hit Turkey in August 2018 when the TL strongly lost value. The exchange rate increased from TL4.9 per US dollar in July to TL6.4 per US dollar at the end of August 2018 (IMF 2022). The sudden stop of capital inflows and at the same time capital flight by residents particularly in the form of portfolio outflows and shifting deposits abroad were the

11. In addition, the Turkish government undertook substantial guarantees for major private projects such as airports.

12. To calculate the ratios, net foreign-exchange liabilities in US dollars were converted to TL based on the nominal exchange rate (foreign-exchange buying) on 30 November 2021, which was equal to TL12.9387 per US dollar (CBRT 2021b).

main factors behind the strong depreciation (for details, see Akcay/Güngen 2019).<sup>13</sup> As a response to the crisis, the Turkish central bank pushed up the money market interest rate from 8 per cent to 24 per cent in September 2018 (CBRT 2022b). After a short stabilisation, the collapse of the TL continued; in early 2022 an exchange rate of over TL13 per US dollar was reached (CBRT 2022a). Driven by depreciation, the consumer price index dramatically jumped and in early 2022 the annual inflation rate reached around 50 per cent (Turkstat 2022). Currency depreciation and high interest rates manifested themselves in a recession with private-sector insolvencies as well as non-performing loan problems and restructuring of banks (Akcay/Güngen 2019; Orhangazi/Yeldan 2021). In the years after 2018 Turkey struggled in a constellation of capital flight and insufficient capital inflows to stabilise the TL, struggled in a recession and a monetary policy which was caught in a conflict to increase the interest rate to stabilise the TL, and struggled with the severe consequences of such a policy for the economic and social situation in the country.

### 4.3 Uganda

Among the countries analysed, Uganda's domestic credit expansion has been by far the lowest. In the 2000s, its domestic credit was only 9.1 per cent of GDP on average and increased only insignificantly to 12.3 per cent in the 2010s, reaching 13 per cent in 2020 (Table 3; World Bank 2022). In 2020 domestic credit in domestic currency was only 7 per cent of GDP (BoU 2021). Uganda is a country almost without credit in its domestic currency. At the same time, real lending interest rates in Uganda were very high. In the period from 2010 to 2018 the average real interest rate for bank credits was 16 per cent (World Bank 2022), a level which stifles any long-term investment and at best allows short-term economic activities like trading (Calabrese et al. 2019). Similarly to Georgia and Turkey, Uganda suffers from high dollarisation (see Table 4); 34 per cent of domestic deposits and 36 per cent of domestic bank credits were in foreign currency in 2021.

In the period 2011–2020 external debt as a percentage of GNI was slightly lower on average than in the previous decade, but always above 30 per cent (see Table 3). In 2020, external debt reached 47 per cent of GNI. Reduction of foreign debt in Uganda was exclusively based on debt forgiveness.

Uganda's foreign debt is mainly based on official development assistance coming from donors such as the World Bank and the African Development Bank, but also from the IMF and foreign governments. Uganda was considered as a showcase for Washington Consensus policies, and for this it got rewarded with high foreign aid (Priewe/Herr 2005: ch. 7.4). In 2020 only 22.7 per cent of external debt in Uganda was private (World Bank 2022). In the 2000s, annual net official development assistance reached its peak with 16.3 per cent of GNI in 2006, before it gradually decreased and remained relatively stable at a level of around 5.6 per cent of GNI on average in the first half of the 2010s. Then it began to rise again and reached a level of 6.1 per cent of GNI in 2019 (World Bank 2022). In recent years China has been playing an increasing role, mainly in the form of non-concessional loans to the government (IMF 2019). Due to the strong contraction in economic activity caused by the COVID-19 crisis, Uganda received massive emergency finance from the IMF and the World Bank in 2020 and 2021 (IMF 2021b; 2021c).

13. The confidence loss in the TL seems to be connected to a political reorientation of Turkey. Turkey gradually turned away from Western democracies such as the European Union and also help from Western international institutions like the IMF, and got closer to countries like Russia and China (Öniş/Kutlay 2021). Open political conflicts with the US, for example in 2018, underlined the new political orientation (Orhangazi/Yeldan 2021).

In the 2000s until 2008 the Ugandan shilling was stable, but from 2008 onwards it began an ongoing depreciation against the US dollar with only short interruptions. The exchange rate for US\$1 increased from 1.8 shillings in 2008 to almost 3.8 shillings in 2018 before it gained some stability once again. The real effective exchange rate was relatively stable over the whole period from the early 2000s onwards (IMF 2022).

#### 4.4 Comparison

Turkey, Georgia and Uganda all suffer from a low-quality national currency. Deposit and credit dollarisation are high. None of these countries managed to establish a stable exchange rate over a longer period of time. Massive depreciations of all three currencies did not allow the building up of a currency with a relatively high quality. Domestic credit expansion in general and especially in domestic currency was relatively low. At the same time real interest rates were relatively high. The case studies support the theoretical argument that countries with low-quality currencies and unprotected competition with foreign currencies suffer from relatively low domestic credit to GDP and at the same time from relatively high real interest rates.

All three countries relied on external credits. But there are differences. Uganda is a country which completely depends on transfers and credit from international financial institutions or foreign governments. There seems to be a cycle of getting foreign aid which increases foreign indebtedness followed by debt relief and a new increase of external debt. The private sector has an extremely low penetration by credit. The situation in Turkey is different. Here capital inflows also went to the government, but a big part also went to the private sector. Credit expansion in Turkey was driven by foreign credit and credit dollarisation. But the credit boom transformed itself into a long-lasting financial crisis when capital inflows stopped and capital flight was triggered. Georgia is somehow in the middle. It also got massive credit inflows from international institutions and foreign governments, but private capital inflows played a role as well, allowing a relatively long period of domestic credit expansion. But foreign debt to GNI has been increasing to dangerously high levels.

None of these countries has been able to trigger long-term stable and sustainable real GDP growth. The manufacturing sector which for these countries is important to catch-up remained weak. From 2000 until 2022 the share of this sector in Turkey and Uganda was stagnating below 20 per cent of GDP; in Turkey in the 1990s the share of the sector was much higher. In Georgia the sector has been shrinking to below 10 per cent of GDP (World Bank 2022). For Turkey an additional problem is that it has been integrated into global value chains by assembling imported intermediate products at low cost, especially in the automotive sector, before they were exported. Domestic value added has been low (Orhangazi/Yeldan 2021). Uganda's industrial sector concentrates on agro-processing, food and beverages, household products, construction materials, and fast-moving consumer goods produced in small- and medium-sized firms for the domestic market. Its 'manufacturing sector has stagnated' (Calabrese et al. 2019: 3). In Turkey, additionally, credit expansion was to a substantial extent oriented towards the real-estate sector with tendencies of a real-estate bubble (Orhangazi/Yeldan 2021). Similarly, in Georgia, the mainly dollarised real-estate sector was expanding due to rising housing demand (IMF 2021a).

## 5 CONCLUSION

Hajo Riese correctly stressed the asset-protecting function of money and its role for economic development. The main hypothesis of this paper is that money is not a 'veil' over a

real sphere whereas the latter is the impotent part of the economy. Money in capitalism is a social force which can not only be used on the level of individual firms and wealth owners, it is a force which stimulates economic development. And it can become a brutal force to destroy the coherence of economies and reproduce underdevelopment.

Money and monetary wealth, among other functions, perform the function of keeping wealth in abstract form. And this serves for the unit of account in credit contracts, from short-term credit relations in the form of demand deposits to long-term credits to enterprises or governments. Theoretical approaches which stress the function of money as an instrument to make the exchange of goods easier only see the harmless sides of money. They do not see that the holders of money and monetary wealth search for an asset which protects them from uncertainty and allow the transfer of wealth from the present into the future. To fulfil this purpose, money in the eyes of small and large wealth owners must be relatively stable, not only in the present situation but also in the expected future. To judge whether money has the quality to fulfil the requirement of wealth owners, dimensions like the international use of a currency or the political power of the money-issuing state also plays a role. The theoretical concept of a money-specific level of a liquidity premium reflecting the quality of a currency allows the understanding of a hierarchy of currencies which typically has only a very small number of currencies at the top and many currencies with low quality at the bottom.

Countries with a low-quality currency have, usually among many other things, two disadvantages. Firstly, their room for credit expansion by the banking system, which involves creation of new monetary wealth, is restricted by preferences of national wealth owners to keep a high percentage of their wealth in foreign currencies. This can take the form of dollarisation of the domestic economy or of capital exports. To prevent permanent devaluations which add to a further erosion of the quality of the national currency, credit expansion in the domestic currency has to be restricted, by the actions of private agents such as banks or the national central bank. Countries with low-quality currencies have, at the same time, a relatively low stock of domestic credit and relatively high real interest rates. Different combinations between low credit volume and high interest rates are possible. Investment dynamics in countries caught in these constellations remains poor and typically is not concentrated on investment in the manufacturing sector.

Secondly, the problem of insufficient and expensive domestic credit seems as if it can be overcome by increasing foreign indebtedness. But currency mismatch and unstable capital flows push countries that are putting their faith in foreign debt into fragile constellations with a high likelihood of financial crises and high economic and political dependency on foreign creditors.

Taking everything together, the low quality of a currency adds to the reproduction of underdevelopment of the countries affected. It delivers its own explanation for the lack of catching up of countries, among other potential reasons. International statistics show that the theoretical conclusions can clearly be seen in reality. The case studies of Georgia and Turkey suggest that the poor quality of the national currency is an important element of the 'premature deindustrialization' (Rodrik 2016) of these countries. Uganda never managed to industrialise in a substantial way.

Countries with low-quality currencies have the possibility of reducing the competitive pressure on their currencies by certain protecting measures like capital controls and policies against dollarisation. But, as a long-term strategy, they have to keep their inflation rates low, avoid high capital inflows, and strive for balanced current accounts. In addition, all kinds of non-monetary policies to support domestic development should be used (see Teipen et al. 2022).

## REFERENCES

- Akcay, Ü., Güngen, A.R. (2019): The making of Turkey's 2018–2019 economic crisis, Institute for International Political Economy Berlin, Working Paper No 120.
- Ari, A., Chen, S., Ratnovski, L. (2020): The dynamics of non-performing loans during banking crises: a new database, ECB Working Paper Series 2395.
- Asonuma, T. (2016): Sovereign defaults, external debt, and real exchange rate dynamics, IMF Working Paper, No 16/37, Washington, DC.
- Bannister, G., Gardberg, M., Turunen, J. (2018): Dollarisation and financial development, IMF Working Paper, No 18/200, Washington, DC.
- Bergsten, F.C. (2009): The dollar and the deficits: how Washington can prevent the next crisis, in: *Foreign Affairs*, 88(6), 20–38.
- Bertaut, C., von Beschwitz, B., Curcucu, S. (2021): The international role of the US dollar, Board of Governors of the Federal Reserve, URL: <https://www.federalreserve.gov/econres/notes/feds-notes/the-international-role-of-the-u-s-dollar-20211006.htm#fig10> (accessed 10 February 2022).
- BIS (Bank for International Settlements) (2019): Triennial central bank survey of foreign exchange and over-the-counter (OTC) derivatives markets in 2019, URL: <https://www.bis.org/statistics/rpfx19.htm>.
- Bonizzi, B., Kaltenbrunner, A. (2021): A Minskyan framework for the analysis of financial flows to emerging economies, in: Bonizzi, B., Kaltenbrunner, A., Ramos, R.A. (eds), *Emerging Economies and the Global Financial System: Post Keynesian Analysis*, London: Routledge, 43–55.
- Bonizzi, B., Kaltenbrunner, A., Ramos, R.A. (2021): Introduction, in: Bonizzi, B., Kaltenbrunner, A., Ramos, R.A. (eds), *Emerging Economies and the Global Financial System: Post Keynesian Analysis*, London: Routledge, 3–13.
- BoU (Bank of Uganda) (2021): Statistics, URL: [http://www.bou.or.ug/bou/rates\\_statistics/statistics.html](http://www.bou.or.ug/bou/rates_statistics/statistics.html).
- Calabrese, L., Golooba-Mutebi, F., Mendez-Parra, M. (2019): Industrial development in Uganda: an assessment of the policy framework, Supporting Economic Transformation, UKAID.
- CBRT (Central Bank of the Republic of Turkey) (2021a): Foreign exchange assets and liabilities of non-financial companies, November, URL: <https://www.tcmb.gov.tr/wps/wcm/connect/333506d7-da01-447f-bafa-e8bdd792731f/monthlydevelopments.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-333506d7-da01-447f-bafa-e8bdd792731f-nWWcJD0> (accessed 15 February 2022).
- CBRT (Central Bank of the Republic of Turkey) (2021b): Indicative exchange rates announced at 15:30 on 11/30/2021 by the Central Bank of Turkey, Bülten No 2021/223 (accessed 21 February 2022).
- CBRT (Central Bank of the Republic of Turkey) (2022a): Statistical data (EVDS), URL: <https://evds2.tcmb.gov.tr/index.phpEVDS> (accessed 15 February 2022).
- CBRT (Central Bank of the Republic of Turkey) (2022b): One week repo, URL: <https://www.tcmb.gov.tr/wps/wcm/connect/EN/TCMB+EN/Main+Menu/Core+Functions/Monetary+Policy/Central+Bank+Interest+Rates/1+Week+Repo> (accessed 21 February 2022).
- Chinn, M., Frankel, J. (2005): Will the euro eventually surpass the dollar as leading international reserve currency?, NBER Working Paper Series, No 11510.
- Christiano, L., Dalgic, H., Nurbekyan, A. (2021): Financial dollarization in emerging markets: efficient risk sharing or prescription for disaster?, Discussion Paper Series, CRC TR 224, No 306, Project C 02.
- Christophe, B. (2007): Georgia: capitalism as organized chaos, in: Lane, D., Myant, M. (eds), *Varieties of Capitalism in Post-Communist Countries*, Basingstoke, UK: Palgrave Macmillan, 183–200.
- Cohen, B. (1998): *The Geography of Money*, Ithaca, NY and London: Cornell University Press.
- De Conti, B., Prates, D. (2018): The international monetary system hierarchy: current configuration and determinants, IE/Unicamp Discussion Paper, No 335.
- De Paula, L., 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, doi: 10.1080/01603477.2016.1252267.

- Eichengreen, B., Hausmann, R., Panizza, U. (2007): *Currency Mismatches, Debt Intolerance, and the Original Sin: Why They are Not the Same and Why It Matters*, Chicago: University of Chicago Press.
- Fritz, B., De Paula, L.F., Prates, D.M. (2018): Global currency hierarchy and national policy space: a framework for peripheral economies, in: *European Journal of Economics and Economic Policy: Intervention*, 15(2), 208–218.
- Global Economy, The (2022): Real interest rate in upper middle income countries (World Bank classification), URL: [https://www.theglobaleconomy.com/rankings/Real\\_interest\\_rate/WB-low/](https://www.theglobaleconomy.com/rankings/Real_interest_rate/WB-low/) (accessed 11 March 2022).
- Helleiner, E. (2008): Political determinants of international currencies: what future for the dollar?, in: *Review of International Political Economy*, 15(3), 354–378.
- Herr, H. (1992): *Geld, Währungswettbewerb und Währungssysteme*, Frankfurt: Campus.
- Herr, H. (2008): Capital controls and economic development in China, in: Arestis, P., de Paula, L.F. (eds), *Financial Liberalization and Economic Performance in Emerging Countries*, London: Palgrave Macmillan, 142–172.
- Herr, H. (2018): Underdevelopment and unregulated markets: why free markets do not lead to catching-up, in: *European Journal of Economics and Economic Policy: Intervention*, 15(2), 219–237.
- Herr, H., Hübner, K. (2005): *Währung und Unsicherheit in der globalen Ökonomie*, Berlin: Edition Sigma.
- Herr, H., Nettekoven, Z. (2021): International money, privileges and underdevelopment, in: Bonizzi, B., Kaltenbrunner, A., Ramos, R.A. (eds), *Emerging Economies and the Global Financial System: Post Keynesian Analysis*, London: Routledge, 116–136.
- Herr, H., Sonat, Z. (2014): The fragile growth regime of Turkey in the post-2001 period, in: *New Perspectives on Turkey*, 51(2014), 35–68.
- IMF (International Monetary Fund) (2019): Uganda's economic outlook in six charts, URL: <https://www.imf.org/en/News/Articles/2019/05/08/na-0508-ugandas-economic-outlook-in-six-charts>.
- IMF (International Monetary Fund) (2021a): Georgia: financial stability assessment, IMF Country Report No 21/216.
- IMF (International Monetary Fund) (2021b): Request for a three-year arrangement under the extended credit facility, IMF Country Report No 21/141.
- IMF (International Monetary Fund) (2021c): Supporting Uganda's recovery from the crisis, IMF Country Focus, URL: <https://www.imf.org/en/News/Articles/2021/07/01/na070121-supporting-ugandas-recovery-from-the-crisis>.
- IMF (International Monetary Fund) (2022): International financial statistics, URL: <https://data.imf.org/?sk=4c514d48-b6ba-49ed-8ab9-52b0c1a0179b&csId=1390030341854> (accessed 6 February 2022).
- Keynes, J.M. (1936): *The General Theory of Employment, Interest and Money*, London and Basingstoke, UK: Macmillan.
- Keynes, J.M. (1937): The general theory of employment, in: *Quarterly Journal of Economics*, 47, 209–223.
- Kindleberger, C.P. (1967): *The Politics of International Money and World Language*, Essays in International Finance, 61, Princeton, NJ: Princeton University Press.
- Knapp, G.F. (1905 [1924]): *The State Theory of Money*, English edn, London: Macmillan.
- Marx, K. (1867 [1976]): *Capital*, Volume 1, London: Penguin.
- Marx, K. (1867 [1983]): *Das Kapital, 1. Band, Druckfassung, Marx-Engels-Werke II, Band 5*, Berlin: Karl Dietz Verlag.
- Minsky, H. (2008): *Stabilizing an Unstable Economy*, New York: McGraw-Hill Professional.
- National Statistical Office Georgia (2021): Statistics, URL: <https://www.geostat.ge/en/modules/categories/23/gross-domestic-product-gdp>.
- NBG (National Bank of Georgia) (2021): Statistics, URL: <https://nbg.gov.ge/en/statistics/statistics-data> (accessed 9 February 2022).
- Nölke, A., ten Brink, T., May, C., Claar, S. (2020): *State-Permeated Capitalism in Large Emerging Economies*, London: Routledge.

- Öniş, Z., Kutlay, M. (2021): The anatomy of Turkey's new heterodox crisis: the interplay of domestic politics and global dynamics, in: *Turkish Studies*, 22(4), 499–529, doi: 10.1080/14683849.2020.1833723.
- Orhangazi, Ö., Yeldan, E. (2021): The re-making of the Turkish crisis, in: *Development and Change*, 52(3), 460–503, doi: 10.1111/dech.12644.
- Ostry, J.D. (2015): Inequality and the duration of growth, in: *European Journal of Economics and Economic Policies: Intervention*, 12(2), 147–157.
- Prieue, J., Herr, H. (2005): *The Macroeconomics of Development and Poverty: Strategies Beyond the Washington Consensus*, Baden-Baden: Nomos.
- Resmi Gazete (2009): Bakanlar Kurulu Kararı: Karar Sayısı, 2009/15082, URL: <https://www.resmi-gazete.gov.tr/eskiler/2009/06/20090616-1.htm> (accessed 6 February 2022).
- Resmi Gazete (2018): Türk Parası Kıymetini Koruma Hakkında 32 Sayılı Karara İlişkin Tebliğ (Tenlik no: 2008-32/34)'de değişiklik yapılmasına dair Tebliğ (Tebliğ no: 2018-32/46), Sayı: 30312, URL: <https://www.verginet.net/Dokumanlar/2018/Tebliğ-2018-11185.pdf> (accessed 6 February 2022).
- Riese, H. (1986): *Theorie der Inflation*, Tübingen: Mohr.
- Riese, H. (2001): Geld: Das letzte Rätsel der Nationalökonomie, in: Betz, K., Fritzsche, U., Heine, M., Herr, H., Joeßges, H., Roy, T., Schramm, J. (eds), *Hajo Riese: Grundlegungen eines monetären Keynesianismus, Ausgewählte Schriften 1964–1999*, Marburg: Metropolis Verlag, 469–485.
- Rodrik, D. (2016): Premature deindustrialization, in: *Journal of Economic Growth*, 21(1), 1–33, doi: 10.1007/s10887-015-9122-3.
- Schiller, F. (2022): To the friends, URL: <https://lyricstranslate.com/de/die-freunde-friends.html> (accessed 8 February 2022).
- Schumpeter, J. (1911 [1949]): *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*, English edn, Cambridge, MA: Harvard University Press.
- Teipen, C., Dünhaupt, P., Herr, H., Mehl, F. (eds) (2022): *Economic and Social Upgrading in Global Value Chains*, London: Palgrave Macmillan.
- Tomz, M. (2008): *Reputation and International Cooperation*, Princeton, NJ: Princeton University Press.
- Turkstat (2022): Consumer Price Index, January, URL: <https://data.tuik.gov.tr/Bulten/Index?p=Consumer-Price-Index-January-2022-45790&dil=2> (accessed 21 February 2022).
- Wilde, O. (2022): Oscar Wilde quotes about money, URL: [https://www.azquotes.com/author/15644-Oscar\\_Wilde/tag/money#google\\_vignette](https://www.azquotes.com/author/15644-Oscar_Wilde/tag/money#google_vignette) (accessed 8 February 2022).
- World Bank (2022): World Bank open data, URL: <https://data.worldbank.org> (accessed 11 March 2022).