Concerns about (public and private) debt levels of low income countries (LICs) have grown significantly over the past few months. This is a warning sign because many of these countries were able to substantially or even completely eliminate their (external) debt under a range of debt-relief initiatives, especially in the 1990s. The structure of the debt they have reaccumulated since then is changing – with regard to both the growing share of foreign currency and the composition of donors and borrowers. Market instruments and bilateral non-Paris Club members are gaining importance, while multilateral donors and concessional loans are losing significance.

The fundamental problem of the recently growing debt burden of LICs is that the borrowed funds are not being consistently used for efficient and productivity-enhancing investment projects. Average productivity in LICs is growing at low rates only, or not at all. Poverty is also on the rise again. What is striking here is that these problems apply to many African LICs in particular.

On balance, debt distress among LICs or the likelihood thereof has increased. Based on these findings, the debt sustainability of these countries needs to be anticipated more carefully and adapted debt instruments need to be developed for LICs.

High debt dynamics in past years

The debate over the debt situation of developing and emerging economies (DEs / EEs) – particularly of LICs – is gathering momentum again. Low income country debt, which is characterised primarily by external debt, was a dominant issue already in the 1980s and 1990s. At the time, the debt burdens of highly indebted developing countries were successfully reduced through a range of debt relief initiatives, especially by the HIPC (Heavily Indebted Poor Countries) and the MDR (Multilateral Debt Relief) initiatives. LICs’ debt in absolute terms was reduced from around USD 86 billion (1998) to USD 62 billion (2006) (Figure 1).1

The debt relief initiatives were linked to the implementation of economic policy reforms, such as currency flexibilisation and improved monetary and fiscal policy. At the same time, both the low-income and the middle-income countries achieved rising economic growth rates from the turn of the millennium. This growth was also a general result of the stronger integration of DEs / EEs into global value chains but would not have turned out as strong without the reforms mentioned.

The strong growth performance is the reason the debt levels of LICs in relation to gross national income (GNI) in the 2000s, that is, after the debt relief initiatives, decreased even more substantially than the actual debt levels (Figure 1). Since then, however, debt levels have returned to a very dynamic upward trend, as was visible in the LICs before the debt relief initiatives took effect. LICs’ external debt increased to around USD 120 billion (2016) and is thus well above the level before the debt relief initiatives came into effect.

Figure 1: External debt of LICs

Pure nominal debt figures paint a distorted picture, however. The increase in relation to economic output has been hard to identify so far. Moreover, part of the debt is unknown as new lenders have entered the arena. China in particular has significantly expanded its lending operations to LICs in recent years. According to the International Monetary Fund (IMF), China’s share in LICs’ public and publicly guaranteed debt has grown from 0.3 % in 2007 to 4.2 % in 2016 and these are just the known figures.2 But these credit relations are not always fully transparent, which makes it difficult to include them in official debt data. The available debt levels and ratios therefore underestimate the problem even more.

Developments vary greatly between the different LICs, however. Most LICs fall into the category of countries that have increased their debt levels to a sometimes massive extent in the past years – starting out from a relatively low external debt ratio (e.g. Cameroon, Republic of Congo, Zambia, Niger and Uganda). This category also includes Ghana and Rwanda, two countries that are currently receiving special support under the ‘Compact with Africa’ initiative of the G20. This contrasts with only very few countries that have a low external debt ratio and have even

Note: This paper contains the opinion of the authors and does not necessarily represent the position of KfW.
been able to reduce it in past years (e.g. Bangladesh, Chad and Nepal).

**The debt structure has become more complicated**

Besides the dynamic of debt in pure volume terms, another factor that weighs in is that the structure of debt has changed – both in foreign currency content and in the composition of lenders and borrowers.

The importance of foreign currency debt has increased noticeably over the years. Today some 80% of (public and publicly guaranteed) debt is granted to the LICs in foreign currency, nearly three quarters of this in US dollars (Figure 2). This is therefore not just a characteristic of LIC debt but in itself already constitutes one explanation for the significant debt increase in the past years: Most LIC currencies have depreciated significantly in the past years (Figure 3). This also applies to currencies that are pegged to the US dollar because over time the respective LIC central banks have no choice but to adjust their exchange-rate pegs towards depreciation. Where there are few or no proceeds in foreign currency, local currency depreciation increases the debt burden significantly. In addition, investment projects threaten to become economically unviable and, depending on the type of project financed, a moderate annual depreciation rate is sometimes enough to cause this.

**Figure 2: Share of foreign currencies in LIC debt**

Share of foreign currencies (contract currencies USD, EUR or predecessor currencies, CHF, JPY, GBP, SDR) in public and officially guaranteed debt, in per cent

![Graph showing the share of foreign currencies in LIC debt]

Source: World Bank

Another reason the debt situation has become explosive is that the share of subsidised loans extended by multilateral and bilateral donors has dropped significantly in the past years. The share of multilateral debt has fallen from 60% to a good 40% and the share of concessional loans has dropped from 75 to 65% since 2005, both as a share of total external debt. Bilateral donors that have extended loans at non-concessionary terms and market instruments have instead gained in importance for the LICs (Figure 4). According to the IMF, the weight of bilateral non-Paris Club members as donors for LICs – including China, whose role was mentioned above – and of commercial debt has doubled since 2007. On the one hand, this changing creditor structure attests to the fact that the economies in question can access alternative funding channels and some even have access to the international capital market. On the other hand, this can also pose problems – particularly because these LICs can only access the capital market in the non-investment-grade segment. The interest burden can end up being higher, there is less transparency, coordination between international creditors becomes more difficult and the Paris Club loses relevance. A particular problem arises from the growing significance of China as a lender, which was mentioned above. China’s credit relations with the individual LICs are typically very non-transparent, which makes it difficult for other donors to assess their debt sustainability. Moreover, the IMF has indicated that the funding maturities with the new creditors have become shorter and this has increased the risk of follow-up funding and the interest rate risk for the future. Under these circumstances, coordinated restructuring measures are likely to become more difficult or less effective overall.

Not least, private sector debt in the LICs is also gaining importance. It has grown rapidly in recent years. Whereas the share of private debt in overall debt was just under one tenth around the turn of the millennium, in 2010 it was already around one quarter and in 2016 more than one third. The debt situation of LICs is therefore no longer just an issue...
that involves public debt alone. For the moment, however, this is not necessarily bad news. Developing economies need credit-financed private sector investment and only in this way can positive macro-economic income growth be induced through multiplier and accelerator processes. Unfortunately, this was not the case to a sufficient extent in the LICs in the past.

Many LICs do not use debt capital efficiently

The finding that, despite rising debt levels, the LICs’ debt ratio initially dropped significantly and last increased only moderately suggests that LICs are enjoying robust economic growth. At first glance, this is correct. After the turn of the millennium, LICs’ real GDP grew by an average 4½ % per year and nearly 5 % after the financial crisis. But this is not enough given these countries’ rapid population growth. Per-capita GDP growth rates in LICs are less than half this rate for the periods mentioned, while they are only around one fifth below GDP growth in the middle-income countries and hardly diverge from it in industrialised countries. One of the consequences is that extreme poverty is not declining in many LICs. The number of people living on or below the international poverty line of USD 1.90 per day or less has not declined significantly (at least not by 2015), on the contrary (Figure 5). This development occurred exclusively in the region of Sub-Saharan Africa, while poverty reduction has indeed made progress in other regions, particularly in East Asia. The number of people living in extreme poverty there has fallen by 95 % since 1990.

The LICs, especially many in Africa, do not appear to be successful in using the debt capital they have raised to finance efficient and productivity-enhancing investment resulting in faster per-capita growth that would be capable of eradicating extreme poverty. The mean investment-to-GDP ratio of LICs is a good 20 % (2016). That is a low rate compared with other countries that have succeeded in moving up to become middle-income or emerging economies, such as India (27 %), Indonesia (33 %), Chile (23 %) as well as the North African states (25 %), all of which have higher rates. Moreover, in around half the LICs the investment-to-GDP ratio has fallen in the past years instead of rising. All of this does not suggest that boosting investment in these countries can reduce the gap to countries with higher per-capita incomes. Investment activity in the LICs is also being hampered by inadequate governance structures and poor investment conditions. On the World Bank’s Ease of Doing Business Index the LICs occupy a median 157th place in a total of 190 and on the Corruption Perceptions Index of Transparency International the 135th place of 180 countries. The two ‘Compact countries’ Ghana and, in particular, Rwanda, merit particular mention in this context as they are significantly higher than the LIC average on both indexes.

The deficits mentioned are ultimately manifested in productivity growth as well, which is too weak in most low-income countries (Figure 6). The productivity gap to the industrialised countries (‘technology frontier’) is not closing – even though many industrialised countries (such as the US or Germany,

Debt stress is rising

LICs’ average creditworthiness is suffering from the developments mentioned above, especially as new factors have recently emerged. With the interest reversal in the US, LICs face higher burdens in servicing their debt, which are often subject to variable interest rates. The external debt service ratio is around 5½ % (2016), a level last seen at the end of the 1980s when the LICs were in the midst of building up the debt problems that were later eased temporarily through the debt relief initiatives (Figure 7). At the same time, LICs have seen their foreign currency reserves diminish. Their reserves had actually improved significantly before the financial crisis. They decreased noticeably again, however. When a country’s financial system has access to sufficient foreign currency reserves through its central bank, it is in a better position to stabilise it in a crisis situation. Shrinking reserves

Figure 5: Poverty development
Number of people living in extreme poverty (<USD 1.90 per day), 1990=100 (value for 2014: interpolated)
Sources: World Bank, KfW Research

Figure 6: Productivity growth in the LICs
Year-on-year variation of total factor productivity (for country groups: median growth rate), in per cent
Sources: Conference Board, KfW Research

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are therefore a warning sign (Figure 7).

Figure 7: Debt service and reserves in the LICs
Debt service (interest and amortisation) on external debt and foreign currency reserves, both in relation to external debt, in per cent

![Debt service and reserves in the LICs](image)

Sources: World Bank, KfW Research

At the same time, international investors are also reassessing risks in emerging economies. In the years after the financial crisis, the DEs/EEs recorded a significant increase in capital inflows which was also caused by rising liquidity creation by the large central banks. Portfolio investments in the DEs/EEs doubled between 2010 and 2017. These positions are apparently being reconsidered as a result of specific problems in particular emerging economies such as Turkey, South Africa, Russia and Argentina. Even if there are no panic outflows, which we do not expect either, the downward pressure on many emerging market currencies reflects growing scepticism towards these economies. The LICs will probably not be able to completely avoid this either, especially since portfolio investments there almost tripled from 2010 to 2017, which means there is potential for correcting such positions in a now changed environment. Not least, the structural and macroeconomic situation of the LICs which we described above is of course typically much more fragile than that of the large emerging economies.

Figure 8: Debt distress index and rating
Debt stress index: Mean value of standardised values from five determinants of the debt situation; debt distress rating: IMF-DSA rating classification

![Debt distress index and rating](image)

Sources: World Bank, IMF, KfW Research

Against this background it is hardly surprising that debt distress in the LICs has increased in the past years. The IMF has already assigned some 45% of LICs to risk of debt distress rating levels 3 or 4 (‘high risk of debt distress’ or ‘in debt distress’). That is a 10-year high. A composite index of normalised debt distress determinants, most of which were already mentioned above, shows that the IMF debt distress rating (DSA rating levels 1 to 4) tends to be worse the lower this index is (Figure 8). What also becomes clear here, however, is that differences do exist with respect to the risk of debt distress within the group of LICs. The regional distribution within the index, in turn, reveals the particularly critical situation of African LICs. The ten countries with the poorest index values includes eight African countries (South Sudan, the Comoros, São Tomé and Príncipe, Mozambique, Liberia, Djibouti, Cameroon and The Gambia), some of which exhibit devastating values and trends regarding the parameters contained in the index. Meanwhile, the situation in Asia is somewhat more balanced. A positive example is Nepal, which has consolidated its public finances, lowered its external debt and ranks above average on the Ease of Doing Business Index. The picture of regional divergence within the LICs is also reflected in the distribution of the DSA rating levels of the IMF (Figure 9).

Figure 9: Regional distribution of the IMF risk of debt distress rating
Share in all LICs in the respective DSA rating in per cent

![Regional distribution of the IMF risk of debt distress rating](image)

Sources: IMF, KfW Research

In the short to medium term, the average debt situation in the LICs is unlikely to improve significantly. The IMF does conclude that (public) debt in the LICs can be contained in the coming years but only under restrictive conditions: through fiscal consolidation, higher growth and the non-realisation of certain risks. A look at the future development of gross public debt, as forecast by the IMF itself, shows that no significant improvement is to be expected. Today, a good one third of all LICs exhibits a general government gross debt ratio of more than 55%. In 2020 this share will not be lower because for many countries with a gross public debt ratio above 55% the IMF expects the ratio to remain the same or fall too little to drop below this threshold (Figure 10, quadrants I and II). The IMF also expects the current account balance of more than half of all LICs to have deteriorated by 2020. This applies in particular to LICs whose gross public debt ratio is still within a moderate range but for which an increase is expected (Figure 10, quadrant IV). That is an indication that the increase in debt levels will occur in the form of external debt, which in turn will increase the vulnerability to future debt distress.
New instruments and approaches are required
In summary, a decisive improvement of the debt situation and debt distress is therefore not in sight. The question thus arises how official creditors can treat these countries in the interest of sustainable finance. Even if the creditor structures change and the share of development funds (ODA = official development assistance) declines, ODA in the form of grants or concessional loans remains an important source of funding for many LICs, especially for HIPC countries (4.6% of gross national income (GNI) in LICs and 5.8% of GNI in HIPC countries in 2016). Debt sustainability of developing countries is thus a key criterion for extending concessional loans in international development finance.

Beyond the degree of concessionality of conventional loans, further debt instruments are debated in line with debt sustainability against the background of the international debate on the implementation of the results of the Third International Conference on Financing for Development held in Addis Ababa in 2015 (Addis Ababa Action Agenda).

Reform financing, such as policy-based lending (PBL), or policy-based grants (PBG) specifically for LICs, allow a broad range of relevant reforms to be addressed, such as sustainable debt management, macro-economic stability measures and raising domestic revenue, as well as corruption prevention. This requires the partner country to be willing to introduce reforms and have adequate public finance management in place. The coordinated donor dialogue with the partner government, as well as among development banks and other financiers, enables an aligned approach towards debt sustainability.

In order to provide relief to poor countries during economic crises resulting from external shocks on the commodities market or in recessions, for example, performance-based instruments such as GDP bonds are proposed in which the debt service is suspended under certain criteria. Debt problems can be exacerbated not just by macroeconomic shocks but by natural disasters as well. In order to support developing countries in situations such as these and to prevent a spike in external debt, direct disaster relief needs to be combined with arrangements that provide for a (temporary) suspension or reduction of interest payments and debt repayments. This provides fiscal policy scope for the affected developing country to overcome the disaster through a reduction in debt service. Innovative instruments in this context are known as shock resilient loans, climate insurance or catastrophe bonds. Such instruments do not exempt the affected countries from the obligation to implement suitable reforms, especially when the shocks are not of temporary nature and therefore demand permanent (including a macroeconomic) adjustments or investments to improve resilience, e.g. financed through green bonds.

New instruments are also necessary to respond to LICs’ growing hard currency debt. Local currency loans are one option. Lenders’ exchange rate risks are hedged directly through the capital market and the hedging costs are passed on to the borrower in full or possibly only in part (the latter as a form of subsidy to make the offer attractive) or/and supported by the public sector (local currency loans funded from the budget). Financing in local currency is appropriate from a developmental perspective, especially in the many cases in which partner countries and local enterprises borrow in hard currency but generate revenue in local currency and therefore bear the full exchange rate risk.

Figure 10: Gross debt and debt dynamics of the state

x-axis: gross public debt ratio of the state as a percentage of GDP; y-axis: variation of gross public debt ratio in 2020 on 2016 in percentage points; green: countries whose current account balance is expected to decline (2020 on 2016); countries specified: members of the Compact with Africa.

Sources: IMF, KfW Research
The measures outlined above are primarily designed to prevent non-sustainable debt. Where debt levels are already very high or possibly no longer sustainable, debt relief initiatives are another option. Here, however, the previously mentioned problem that the reach of international debt-relief initiatives tends to diminish with the increasingly changing creditor structure becomes relevant. That is why the IMF as well as individual NGOs and researchers demand international insolvency proceedings for states as well as improved creditor coordination.

Debt swaps can also be considered for highly indebted lenders on a case-by-case basis. This would involve writing off some or all of the debtors’ debt, if they invest the equivalent and/or the funds freed up from the interest and repayment instalment in developmentally relevant projects such as climate change adaptation. A debt swap in this sense is not an internationally coordinated measure but is initiated by individual creditors. Its effectiveness for reducing the debt level is therefore more limited the more diversified a country’s creditor structure is and is targeted more at developmental objectives rather than debt sustainability.

Conclusion
Loans are necessary to finance investment and, hence, realise higher levels of income. This also applies not least to low-income countries, which are unable to raise sufficient public or private funds of their own to mobilise the necessary investment funds themselves. Unfortunately, many LICs have not been able to put the borrowings and the new scope resulting from debt-relief initiatives to effective use for successful poverty eradication, significant productivity gains or higher per-capita growth. Major reasons for this include an unsatisfactory development of investment in combination with weak institutions and inadequate governance (keyword: corruption).

In future, external loans should anticipate the partner countries’ debt sustainability more carefully. In addition, programmes aimed at implementing economically sound reforms should be financed. In return, loans could be designed in a way that the debt service falls or is suspended when countries are exposed to shocks that are not of their own making, such as drastic commodity price variations or natural disasters. At the same time, the issue of local currency financing should remain on the agenda. Local currency loans can mean a significantly lower burden for the LICs and therefore justify the donors’ willingness to participate in the absorption of exchange rate risks.

In the short to medium term, however, the problematic debt situation of LICs cannot be expected to change significantly. Development finance provided by one country cannot generate sustainable effects unless the LICs are willing to implement reforms over the long term, for example by adopting a responsible budget policy, increasing domestic income, stabilising local currencies, establishing functioning local capital markets or adhering to improved governance standards.

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1 Cf. also Raschen, M. (2013), Verschuldung armer Entwicklungsländer: Krise gebannt, Risiken bleiben (Debt levels of poor developing countries: crisis averted, but risks remain – our title translation, in German only), Focus on Economics No. 31, KfW Research.


3 LICs that use the CFA-Franc as local currency (CFA-Franc BEAC or CFA-Franc BCEAO) are an exception to this depreciation trend. These currencies are closely coupled to the euro and therefore fluctuate against the US dollar to the same degree as the euro. The euro, in turn, has roughly maintained its value vis-a-vis the US dollar to this day since it was introduced (with considerable fluctuations, of course).

4 Cf. e.g. Cubb, C., Durland, J. and Horrocks, P., Achieving sustainable development through local currency financing (http://www.a-id.org/2017/05/05/achieving-sustainable-development-through-local-currency-financing), last retrieved on 13 Nov. 2018). With the aid of a sensitivity analysis, using the example of solar projects and assuming a ten-year term, the authors arrived at the conclusion that these projects default when the local currency depreciates at an annual rate of around 4% because the debt service coverage ratio falls below 100%.

5 Concessional lending instruments are characterised by a grant element such as particularly low interest rates or very long maturities. In order for the World Bank to classify a loan as concessional and hence add it to the corresponding debt statistic, the grant element must be 25% or more when the loan is extended.

6 Although poverty rates – the number of people living in poverty as a percentage of total population – are on the decline in Sub-Saharan Africa as well, the development described with regard to the development of absolute poverty there has caused the poverty rate in Sub-Saharan Africa to improve only below average since 1990 – from around 55% to some 40% in 2015 – while it dropped from 35 to 10% worldwide and even from 60% to a good 2% in East Asia during the same period.

7 Cf. IWF (2018b), Debt vulnerabilities in emerging and low-income economies, p. 8.

8 The debt distress index is a median value of standardised values combining variations in the current account balance, variations in reserve coverage, variations in the budget balance (comparing 2016 and 2013), the external debt level and the combined Ease of Doing Business categories ‘strength of governance structure’ and ‘extent of shareholder rights’. Some data are incomplete; in order to keep the country sample as large as possible, in the affected cases the index consists of only three or four sub-values.

9 Cf. IWF (2018b), p. 9. The risks formulated there are: moving away from fiscal consolidation, the inability to implement reforms, and shocks.

10 Cf. IMF (2018 c), Statistical Appendix to the World Economic Outlook, autumn edition.
The value of 55% is an approximate indicative limit value for the sustainability of public debt in LICs. It corresponds to roughly the average of all gross public debt ratios of LICs and is at once the IMF’s threshold value for countries in the medium debt sustainability class.

Loans granted under PBL are disbursed after previously defined reform steps known as triggers. Thus, for example, the policy matrix of the financial sector PBL in the reform partner country Tunisia includes the establishment of a debt agency to ensure a sustainable budget as a reform measure. Even if this example does not apply to an LIC, this engagement can serve as a model for PBL or PBG.