IOB
Institute of Development Policy and Management
University of Antwerp

ACROPOLIS
BeFinD

The changing face of African public debt

Danny Cassimon, Dennis Essers, Karel Verbeke

Acropolis-BeFinD, DGD Brussels
26 January 2017

Structure of the presentation

Basics of public debt

- Terminology: domestic vs. external debt, concessionality, creditor types
- Debt diversification
- Debt sustainability and joint IMF/World Bank DSF

Changing face of Rwandan public debt

- Pre-HIPC debt composition
- Post-debt relief evolution of external and domestic public debt
- Debt management and sustainability
- 2012 Aid suspension

A broader view

- Eurobonds in SSA
- Implications of *changing face of debt* for Belgian development cooperation

Basics of public debt

Terminology

Public debt allows government to spend more than its current (tax and non-tax) revenues, *including grant aid*, i.e. to run a fiscal deficit

PPG debt: all debt owed or guaranteed by public debtors to various creditors.

- **Domestic public debt:** debt owed to local creditors/in local currency/ruled by local law
- **External public debt:** debt owed to foreign creditors/in foreign currency/ruled by foreign law
  - Bilateral, multilateral or commercial creditors
  - Concessional/non-concessional
- **Publicly guaranteed debt:** debt contracted by non-government actors but guaranteed by the government

Terminology

- **Concessionality** of debt
  - Degree to which debt looks like a grant rather than commercial loan: **grant element**
  - Grant element lies **between 0%** (commercial loan) and **100%** (pure grant)
- **Tradable** or **non-tradable** debt
  - Tradable: Treasury bills (maturity ≤ 1 year) and Treasury bonds (maturity >1 year)
  - Non-tradable: e.g., central bank advances
- **Commercial creditors**
  - Commercial banks (syndicated or not)
  - Institutional investors: mainly pension and insurance funds
  - Retail investors: individuals/grouped
- Special case: **'Eurobond'**
  - *International* bond issued in *foreign currency*, usually USD or EUR

Debt diversification

- Traditionally, external financing in SSA has been through *grant* aid and highly concessional *loans* from multilaterals and bilaterals
- Key characteristics of **official grants and highly concessional loans**
  - \+ Increase of scarce foreign exchange at inflow
  - \- (Limited) exchange rate risk for loans
  - \- Donor conditionality
  - \- Volatile and unpredictable (largely supply-driven)
  - ? Ultimate net foreign exchange generation (linked a.o. to conditionality)
- Access to these resources will (gradually) diminish as SSA develops and *traditional/emerging donors* move to less concessional finance
- Also willingness of *partner countries* to accept such financing (and its conditionality) decreases; active search for other financing options

Debt diversification

- Different non-concessional alternatives with their own risks:
  - **External commercial creditor public debt** (Eurobond/syndicated loan):
    + Relatively cheap (but costs highly dependent on external environment)
    - Exchange rate risk
    - Refinancing /redemption risks (often bullet repayment)
    - Exposure to external shocks
  - **Domestic public debt** (bills/bonds/central bank advances):
    + No exchange rate risks
    + Positive spillovers for financial market development, monetary policy, accountability (?)
    - Higher real interest rates (due to high expected inflation, lower liquidity, etc.)
    - Interest rate/refinancing risks (often shorter duration)
    - Potential negative externalities if concentrated ownership, esp. with commercial banks (crowding out of private sector credit and sovereign-bank 'doom loop')

Debt sustainability

- Economic concept of debt sustainability:

  Debt is sustainable if the government does not, in the future, need to default or renegotiate or restructure its debt or make implausibly large policy adjustments

- Debt sustainability analysis (DSA) looks at the ratio of present value of debt stock or nominal debt service to some measure of repayment capacity (GDP, export proceeds, fiscal revenues)
- … and compares this ratio to sustainability thresholds (derived from cross-country historical data)

IMF/WB Debt Sustainability Framework for low-income countries (DSF-LIC)

Monitoring tool to assess current and future debt levels, according to 4 basic steps:

1. Deciding on appropriate debt sustainability concepts and indicators, e.g. specific DSF LIC indicators and threshold values (*see next slide*)

2. Conducting consistent forward-looking analysis of the debt dynamics, based on chosen indicators, under a most-likely benchmark scenario, over medium and long term

3. Running stress tests using detailed alternative scenarios, tailored to relevant country vulnerabilities

4. On the basis of 1-3: assess the level of (risk of) debt distress:

‘low’, ‘moderate’, ‘high’ or ‘in debt distress’

IMF/WB DSF thresholds

CPIA score	Policy performance	Debt Burden thresholds				
		Present Value of debt in percentage of			Debt service in percentage of	
		GDP	Exports	Revenue	Exports	Revenue
HIPC			150	250		
CPIA ≤ 3.25	Weak	30	100	200	15	18
3.25 < CPIA ≤ 3.75	Medium	40	150	250	20	20
CPIA > 3.75	Strong	50	200	300	25	22

Latest DSA results for Belgian partner LICs

CPIA score	Policy performance	Risk of debt distress			
		Low	**Moderate**	**High**	**In debt distress**
CPIA ≤ 3.25	Weak		DR Congo, Guinea	Burundi	
3.25 < CPIA ≤ 3.75	Medium	Benin, Tanzania, Uganda	Burkina Faso, Mali, Niger,		**Mozambique**
CPIA > 3.75	Strong	**Rwanda**, Senegal			

Use of DSF-LIC

- **IMF Debt Limits Policy**
  - Translating DSAs into performance criteria or indicative targets for additional borrowing policies, e.g., minimum concessionality (grant element)
- **World Bank IDA grant allocation**
  - *Low risk*: loans on standard IDA terms
  - *Moderate risk*: blend, 50% IDA loans and 50% grants
  - *High risk or debt distress*: IDA grants only
  - To avoid moral hazard IDA allocation is reduced by 20% if disbursed in grants
- **Paris Club debt restructurings**
  - Debt sustainability considerations taken into account

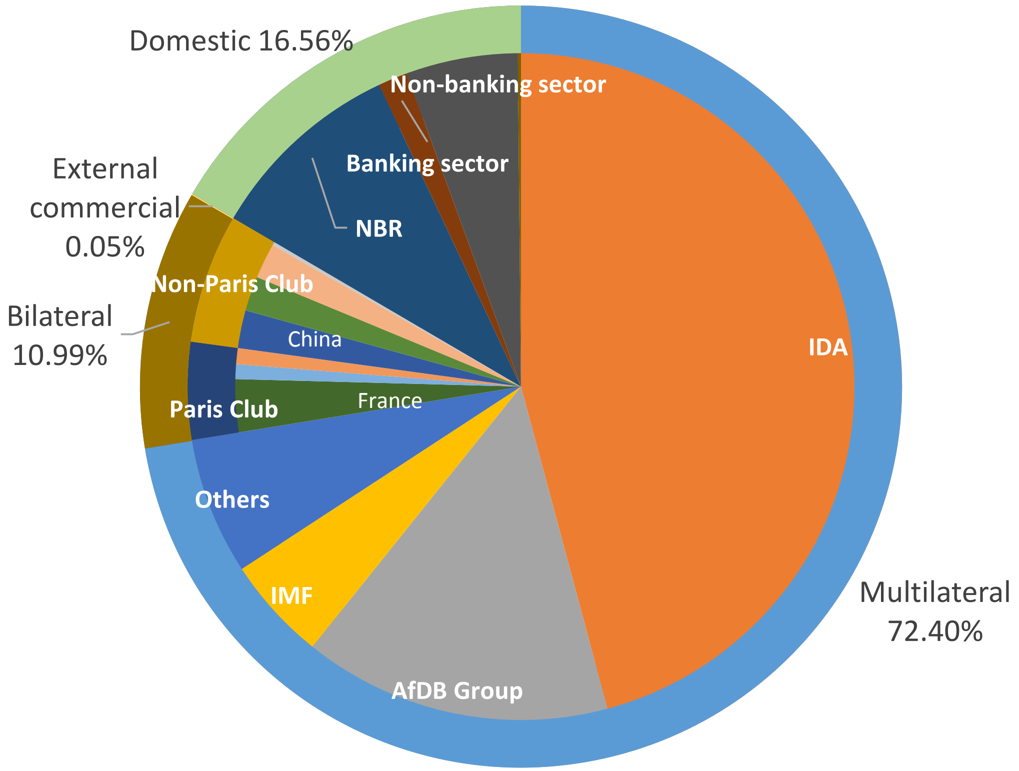
Changing face of Rwandan public debt

Background to our BeFinD report

- **HIPC and MDRI debt relief** provided Rwanda with **‘clean slate’**
- **Rwanda aspirations** (cf. Vision 2020)
  - Reach MIC status by 2020
  - Fulfil large infrastructure needs
  - Reduce reliance on traditional donor aid (over MT)
  - … while keeping debt sustainable.
- **Our report**
  - Study evolution of size and composition of post-relief Rwandan public debt (+ consequences for debt management and sustainability)
  - Illustrate interaction of new debt with donor aid: case of 2012 aid suspension

Pre-HIPC composition of Rwandan debt

End-December 1999 Rwandan public debt stock totalled US$1.5bn, most of it owed to (multilateral) external creditors.

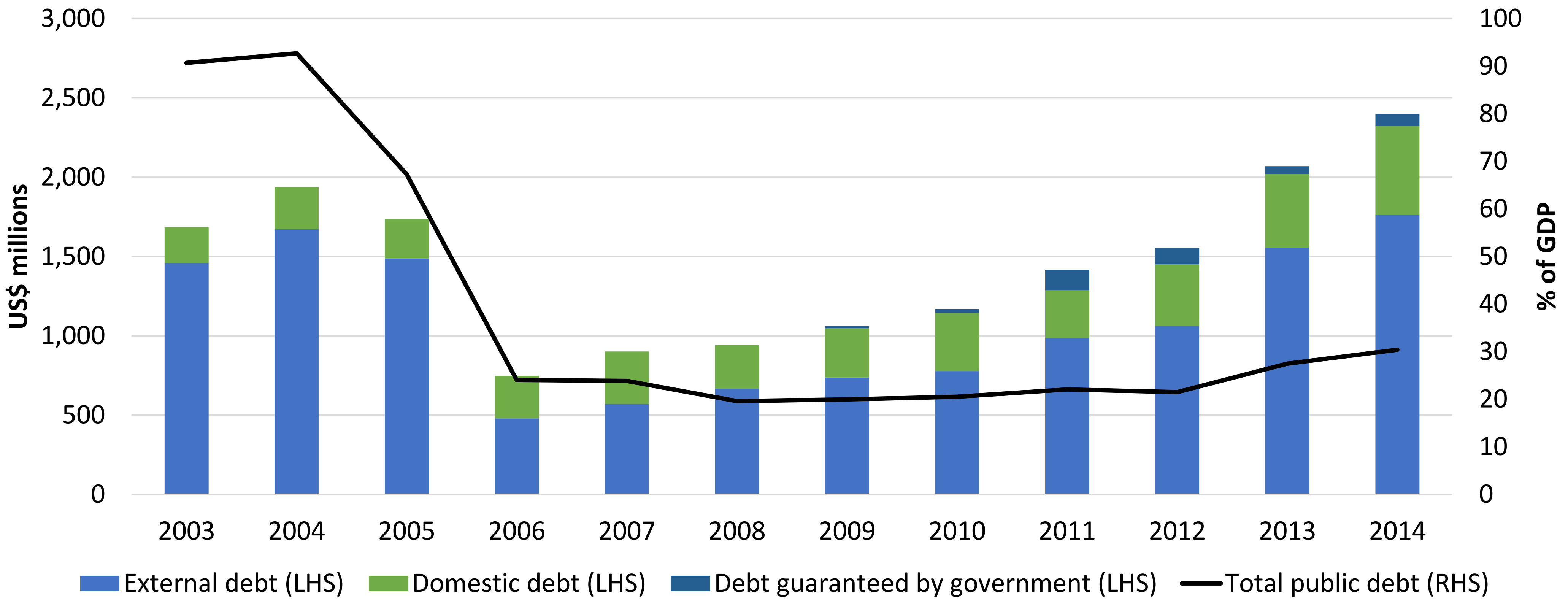


Rwandan public debt relief

- **HIPC decision point** (December 2000)
  - External debt sustainability (PV<150% of exports) would be attained with common reduction factor of 71.2%
- **HIPC completion point** (March 2005)
  - Eventual debt stock reduction of US$1.4bn
  - Full debt relief by multilateral, Paris Club creditors and China, mostly rescheduling by Kuwait and Saudi Arabia
- **MDRI qualification** (January 2006)
  - Additional U$516mn debt stock reduction by IMF, IDA and AfDB

Evolution of public debt after relief

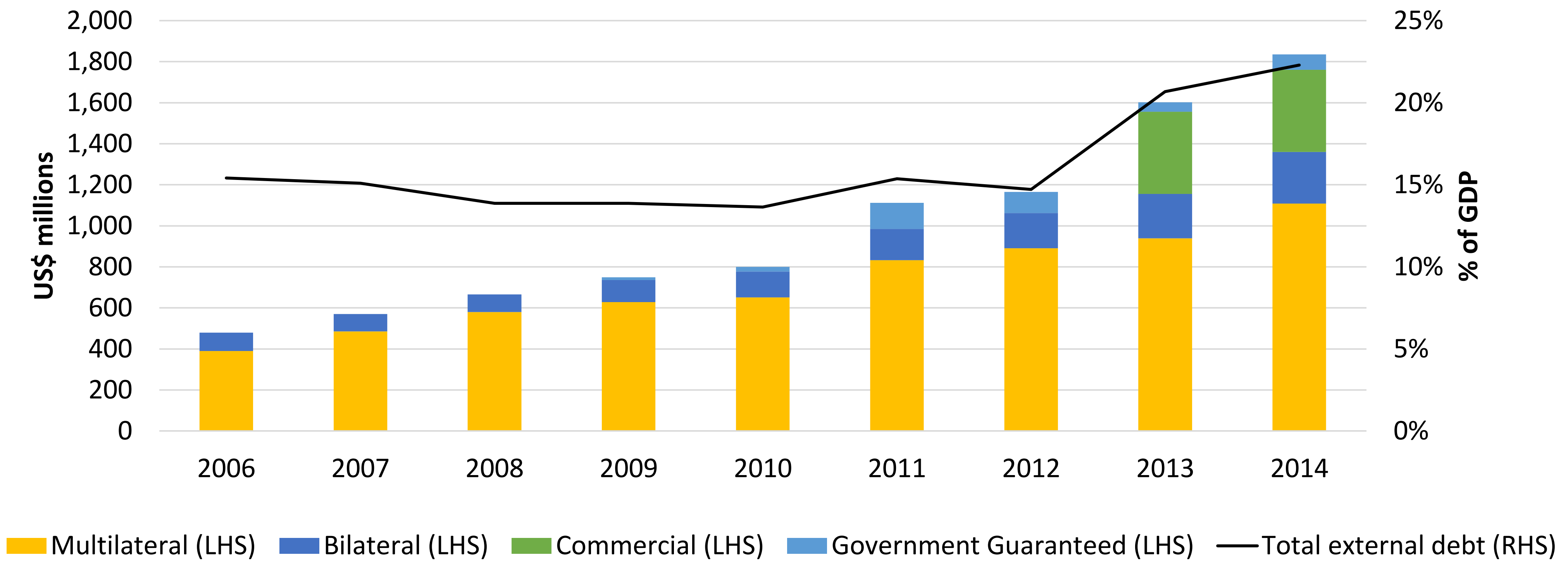
Tripling of Rwandan public debt in absolute terms but only moderate increase in relative terms since 2006. This compares well to the rest of SSA.



Source: MINECOFIN

External public debt

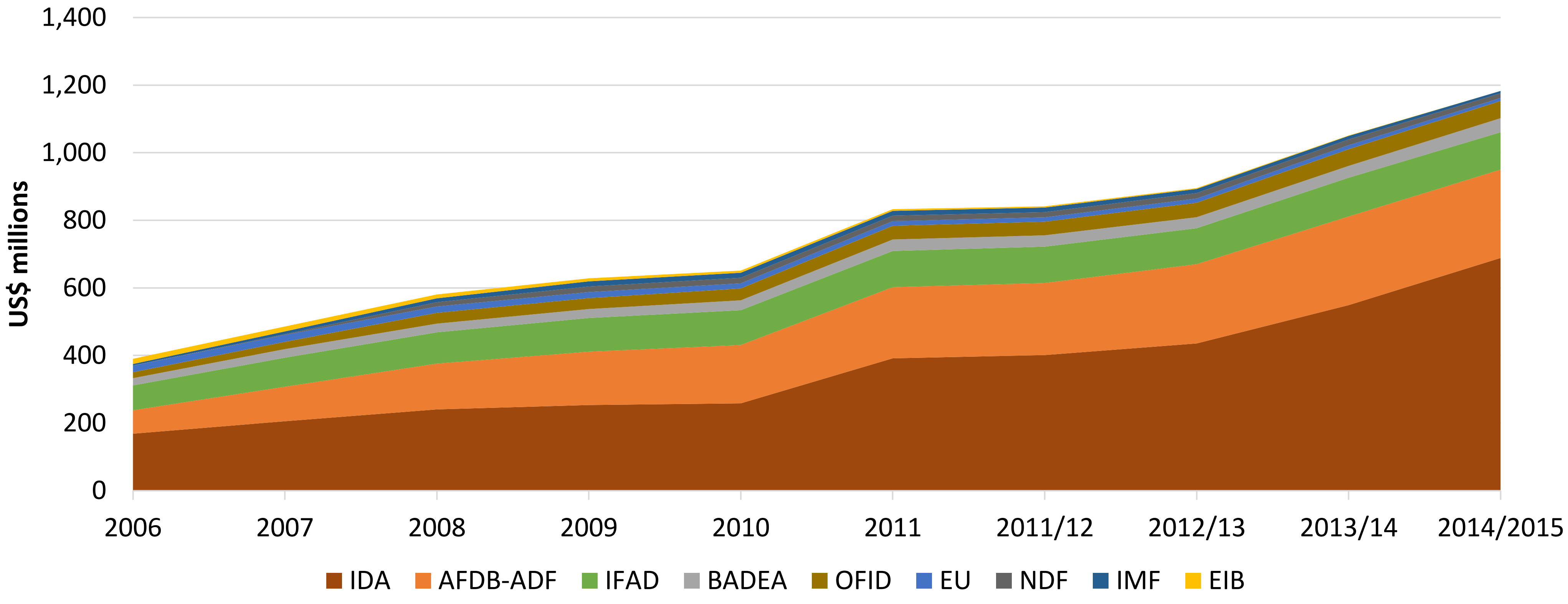
Concessional loans from multilaterals still account for lion share of external public debt. Commercial debt only since 2013.



Source: MINECOFIN

External public debt: multilateral creditors

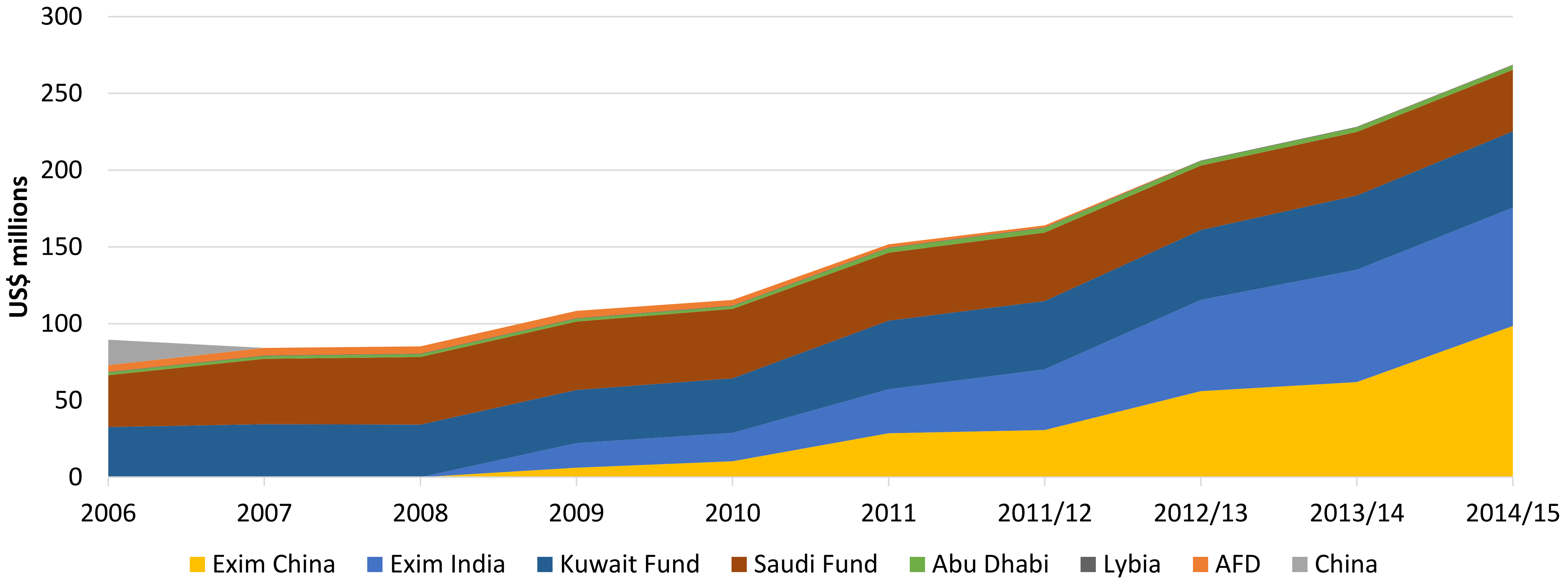
Creditor composition of multilateral debt has hardly changed: IDA and AfDB dominate. Part of increase in levels due to shift from grants to loans.



Source: MINECOFIN

External public debt: bilateral creditors

Creditor composition of bilateral debt has changed significantly: no more Paris Club loans outstanding. Renewed interest in loans (South Korea, Japan). Will European donors (Germany, France, EU) follow?



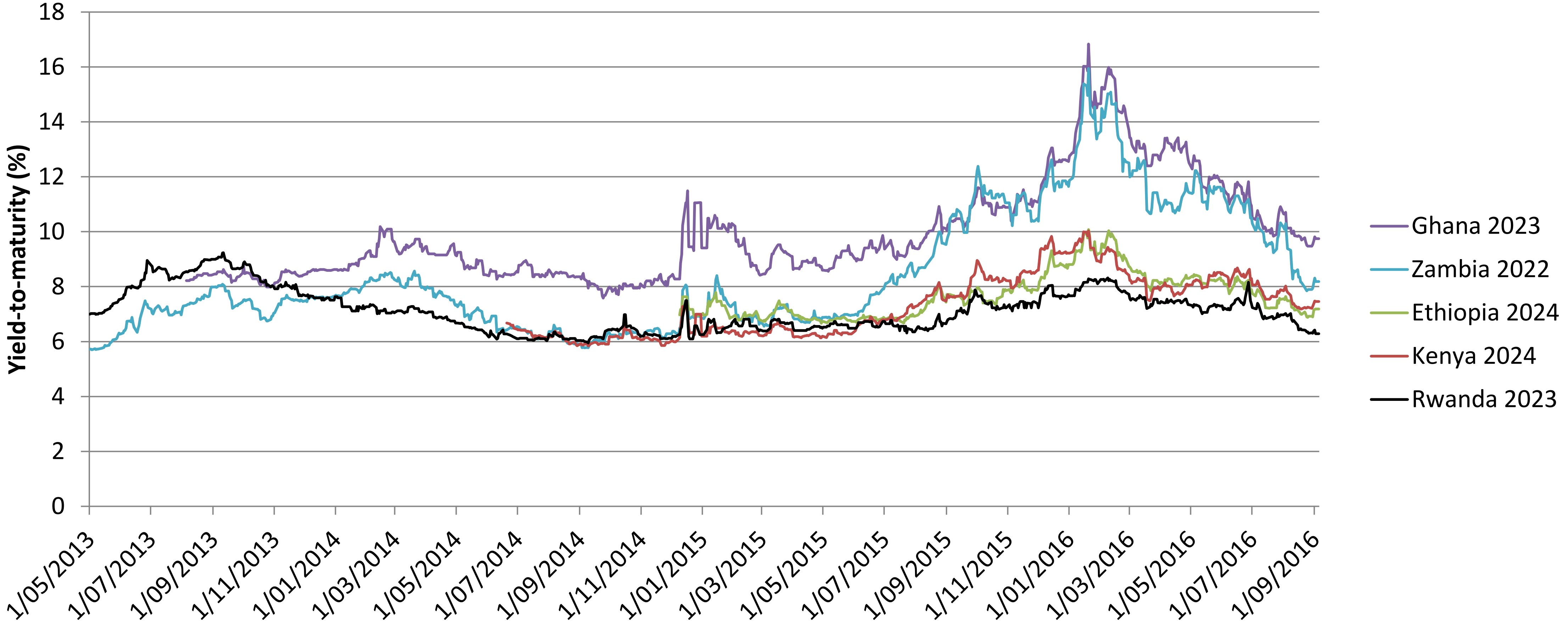
Source: MINECOFIN

External public debt: commercial creditors

- **On 25 April 2013 Rwanda issued its maiden 'Eurobond'**
  - US$400mn with maturity of 10 years
  - Fixed annual coupon of 6.625% and bullet repayment in May 2023
  - Proceeds used to (re)finance infrastructure: Kigali Convention Centre, RwandAir, Nyabarongo hydropower
  - Main investors are UK- and US-based fund managers
- **Relatively low interest rate at issuance and massive oversubscription** (US$3.5 billion or 8.5 times)
- At issuance Rwanda paid a premium over other Eurobonds (like Zambia's); **yields have increased since summer 2015 but significantly less so than for Ghana, Zambia, etc.** (*see next slide*)
  - Prices for Rwanda's main exports (coffee, tea, cassiterite, coltan) have declined less than prices of oil, natural gas, copper, etc.
  - Rwanda's relatively low level of debt and low risk of debt distress (cf. DSA)
  - Rwanda's reputation of being an efficient bureaucracy and clarity about the use of the Eurobond proceeds
- **Plans for second (larger?) Eurobond temporarily shelved**

External public debt: commercial creditors

Rwandan Eurobond yields compare well to those of other SSA Eurobonds.



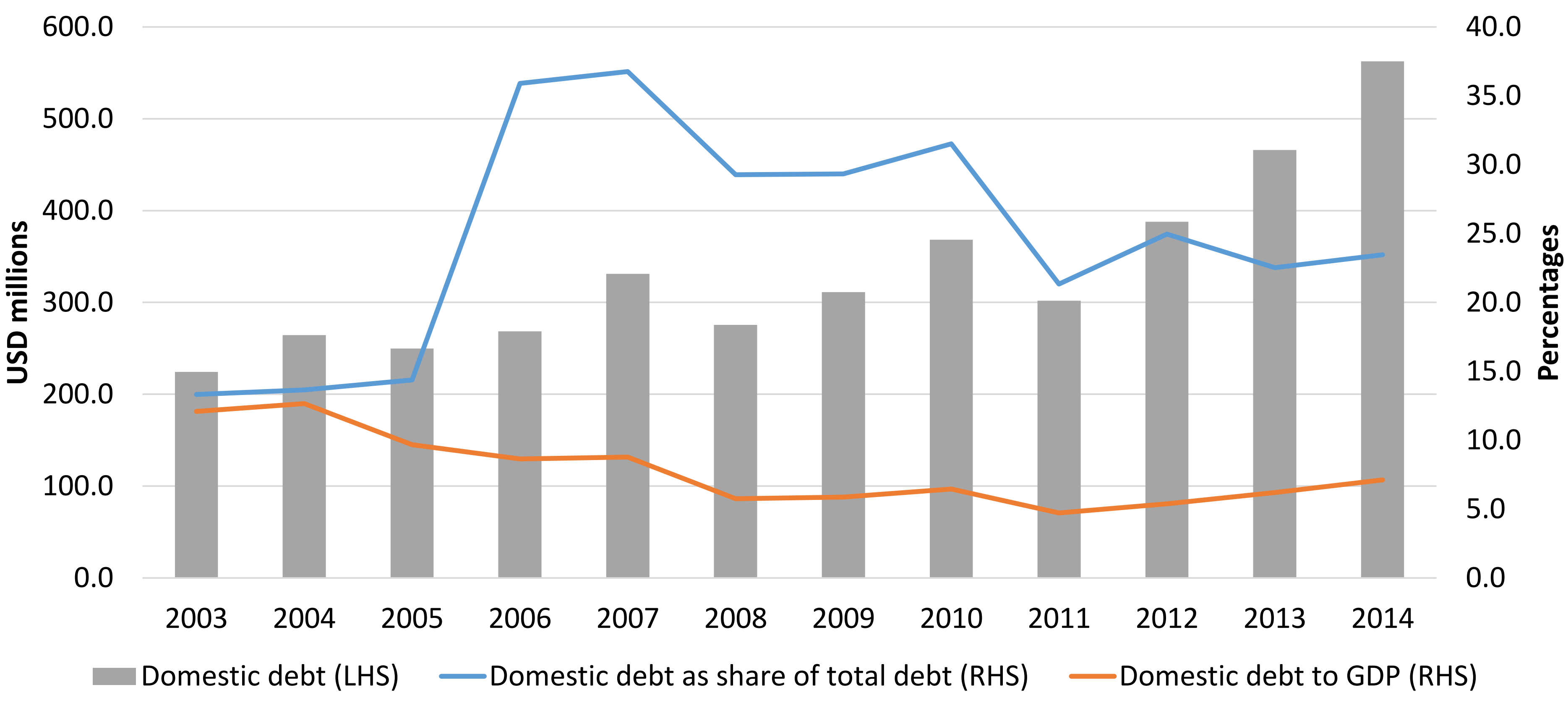
Source: Thomson Reuters Datastream

Domestic public debt

- Due to *external* debt relief *domestic* debt now non-negligible: close to 25% of total in 2014.
- Rwanda's domestic public debt mainly exists of:
  - BNR advances
  - Treasury bills and bonds (issued for infrastructure investment/deficit financing and capital market development)
- **'Marketable' part of Rwandan domestic public debt (T-bills and T-bonds) on the rise**
  - Weekly issuance of T-bills
  - Sporadic issuance of T-bonds in 2008, 2010 and 2011; quarterly programme since 2014
  - T-bond maturities up to 15 years (2, 3, 5, 7, 10 years)
  - Auction-determined yields between 8 and 13.5%
  - Main investors are local commercial banks and pension/insurance funds (esp. Rwanda Social Security Board RSSB)
  - Little foreign participation (due to currency exchange costs and limited supply)
  - Very limited secondary market trading on RSE, altough promotion of active domestic public debt market is one of objectives of Rwandan debt management

Domestic public debt

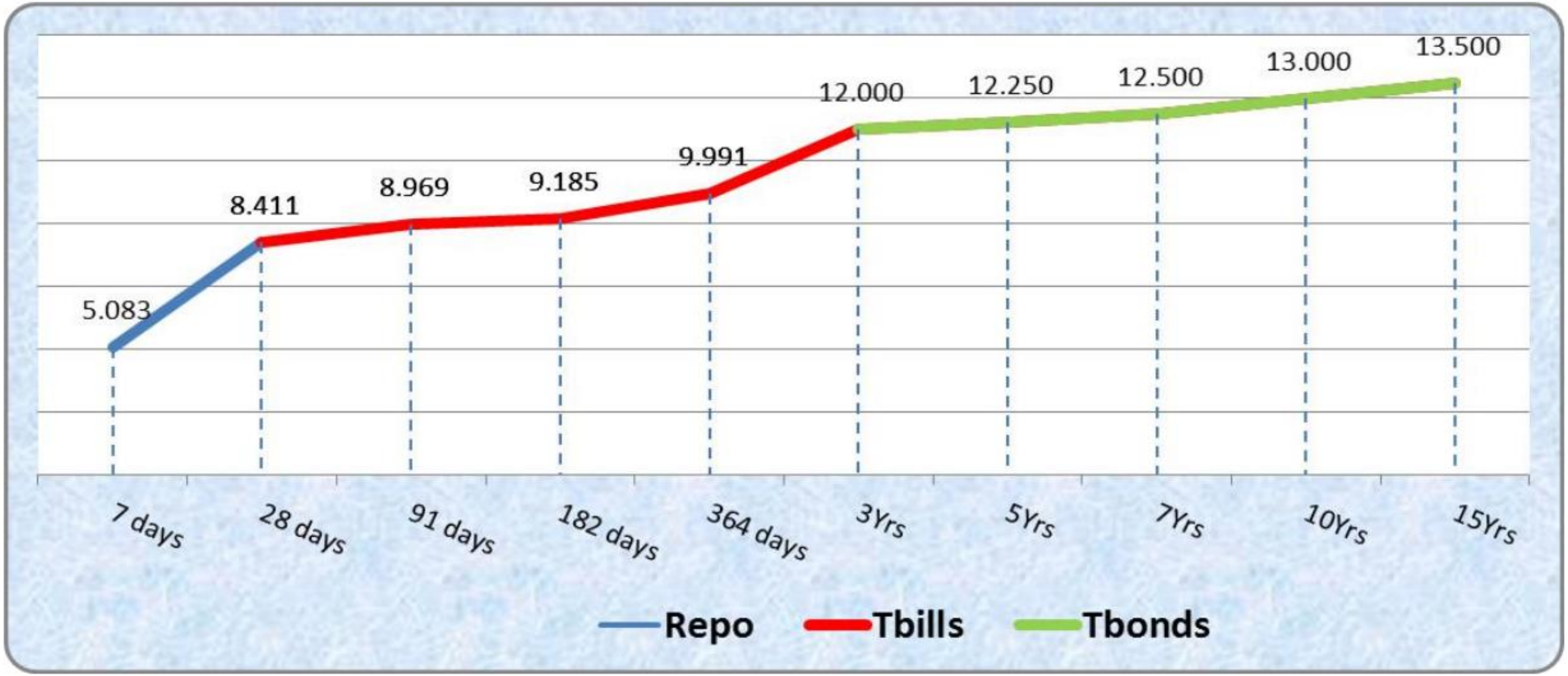
Evolution of total outstanding **domestic public debt stock** (2003-2014)



Source: MINECOFIN

Domestic public debt: local currency bonds

Yield curve on 6/1/2017



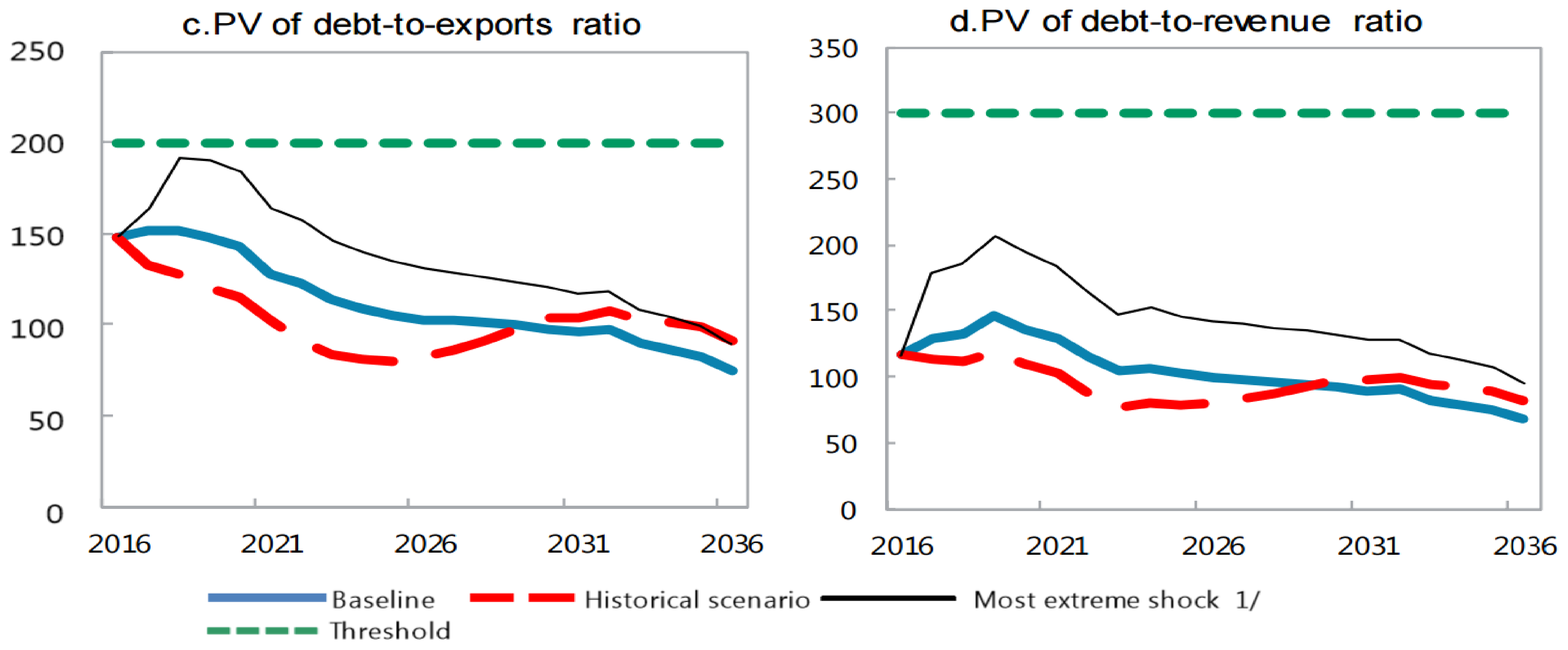
Source: BNR

Debt management and sustainability

- **'New age of choice'** (Prizzon and Mustapha, 2014): Rwanda needs to trade off **different creditors and debt instruments**
- **Debt management capacity remains limited**
  - Finalizing DeMPA reform plan with World Bank
- IMF/World Bank DSA
  - High score for 'debt policy' dimension of CPIA (4/6): 'strong' performer
  - 'low risk of debt distress' (since December 2013): All debt indicators are below standard thresholds, except for debt service in 2023 (Eurobond bullet repayment)
- **Main debt sustainability risks relate to generation (and use) of forex**
  - Public infrastructure investments demand forex now, in return for forex supply later (esp. tourism)
  - Rwandan exports (coffee, tea, minerals) expose country to international price fluctuations
  - June 2016: US$204mn Standby Credit Facility of IMF to boost forex reserves
  - Over MT/LT Rwanda will need to expand and diversify exports
  - Reduced reliance on donor aid will put extra pressure on forex reserves

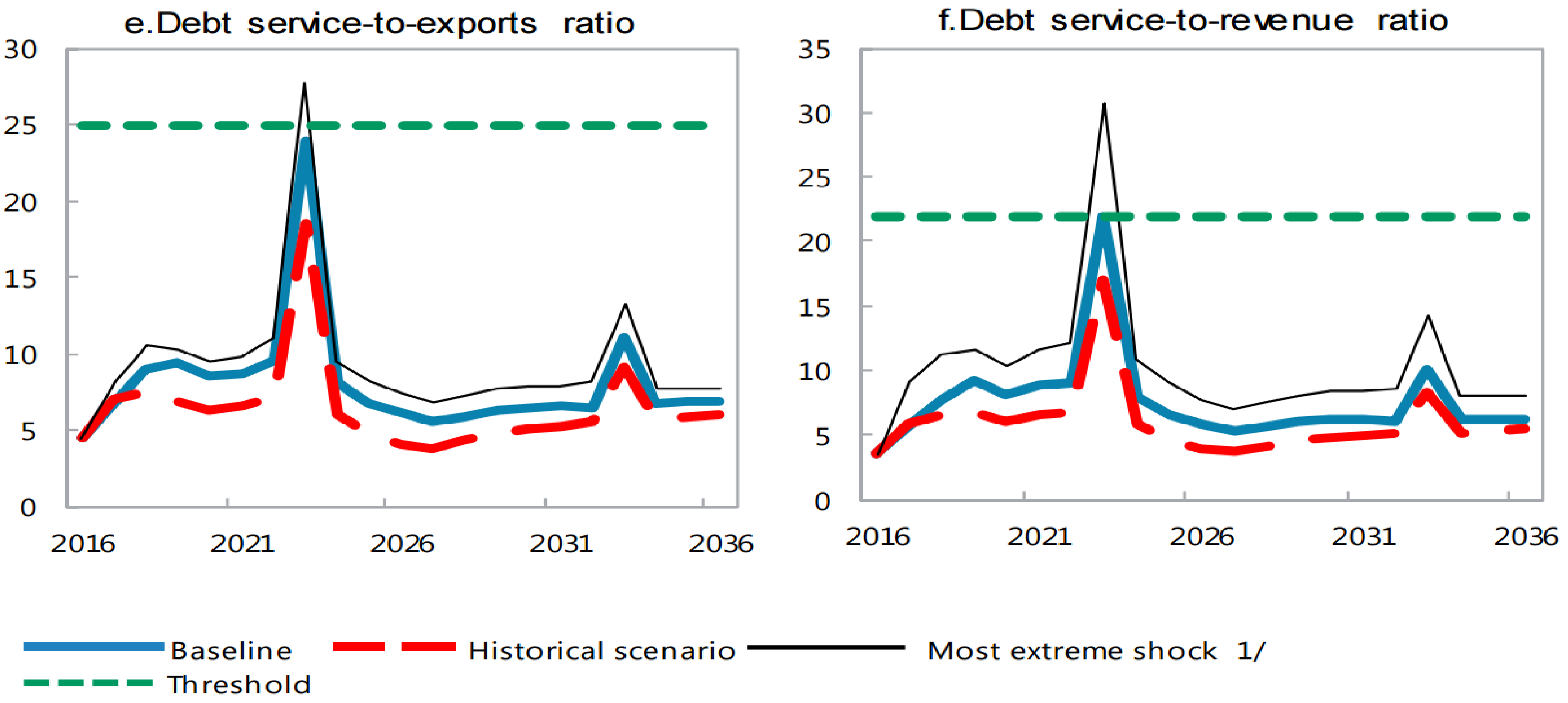
Future debt sustainability

External public debt stock indicators (under various DSA scenarios)



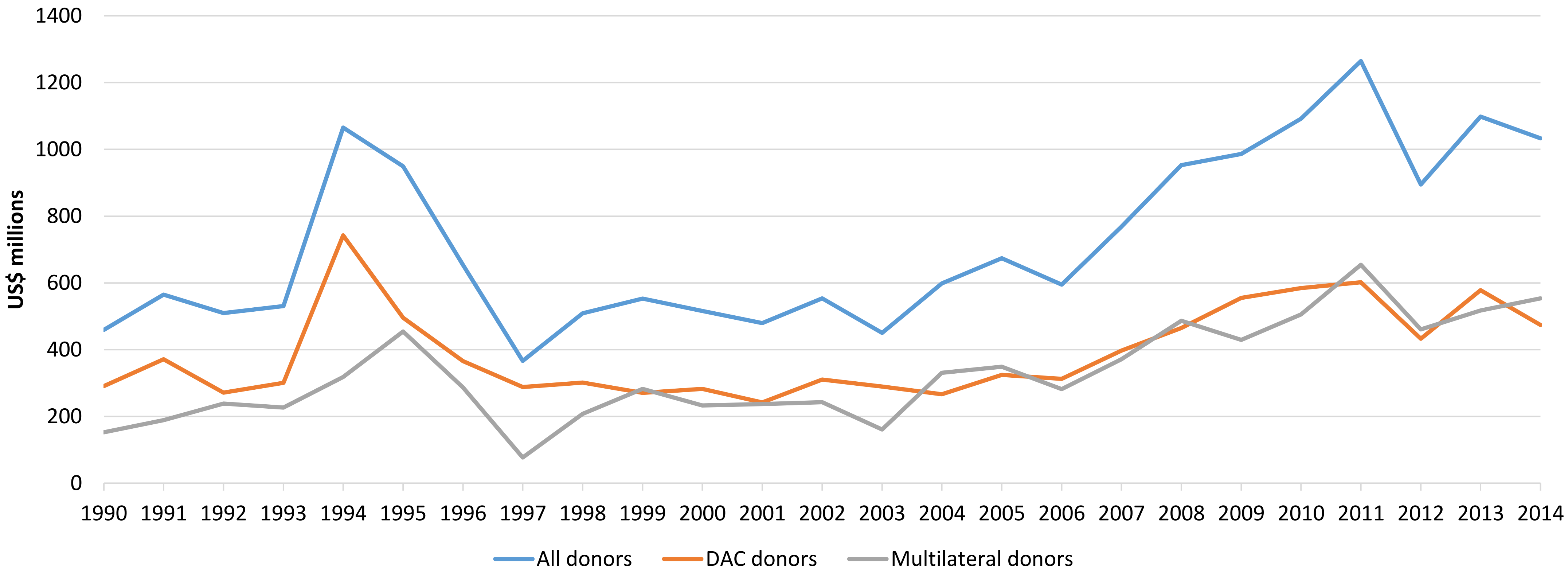
Future debt sustainability

External public debt service indicators (under various DSA scenarios)



Aid suspension

Upward trend in net ODA disbursements came to abrupt end in 2012, following publication of critical UN report on Rwandan involvement in Eastern DRC



Donor reactions: some examples

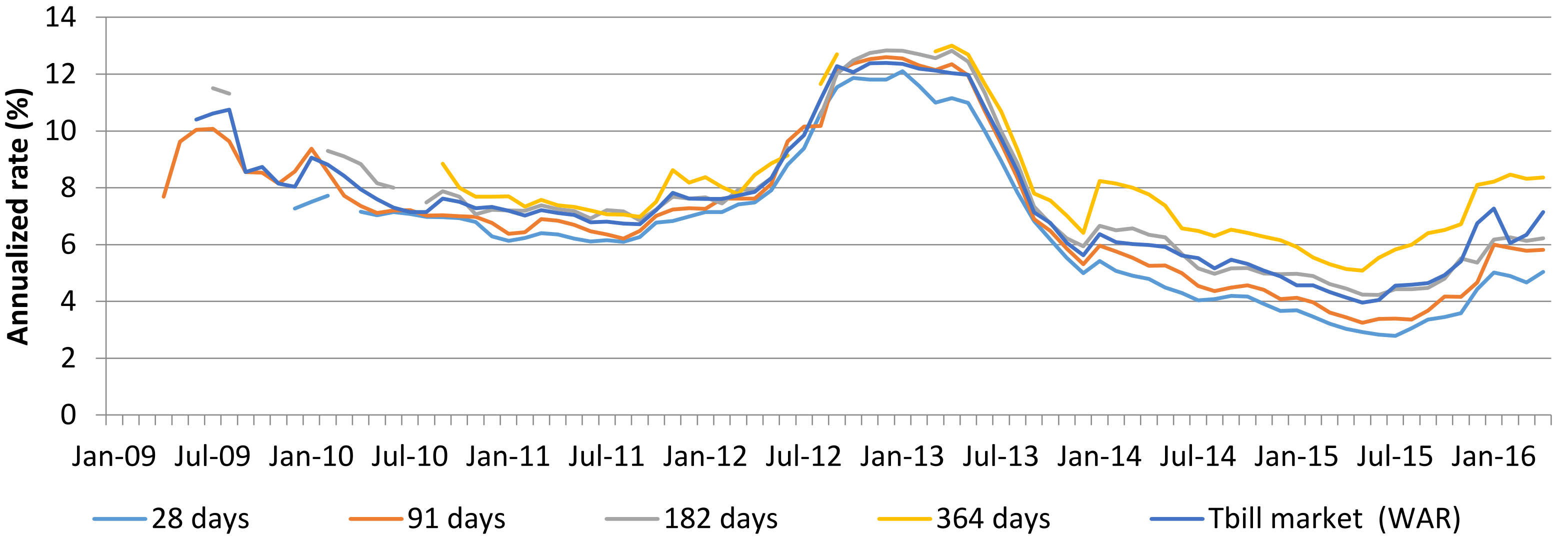
- **Several donor (temporarily) suspended (part of) their aid**, including:
  - **UK** initially delayed *general budget support (GBS)* tranche planned for July 2012; half was disbursed later, other half reprogrammed as *sector budget support (SBS)*; subsequent tranches of GBS were all reprogrammed
  - **Germany** cancelled planned GBS disbursements; all was later reprogrammed to three projects
  - GBS-like DPL of **World Bank** was not presented to the Executive Board for approval, World Bank provided some emergency support on demand of Rwandan government; all earlier commited funds were reprogrammed to SBS and projects.
  - **Belgium** suspended military cooperation. For FY2012/13 two tranches of SBS in health and justice sectors were foreseen and planned in the original Rwandan budget of 2012/13. As underlying legally binding financing agreements were not yet signed at time of UN report (due to Belgian budgetary challenges) funds were not disbursed. *Minister of Foreign Affairs did not consider this an aid suspension.* Financial agreement was finally signed in June 2013 and funds disbursed in October 2013.

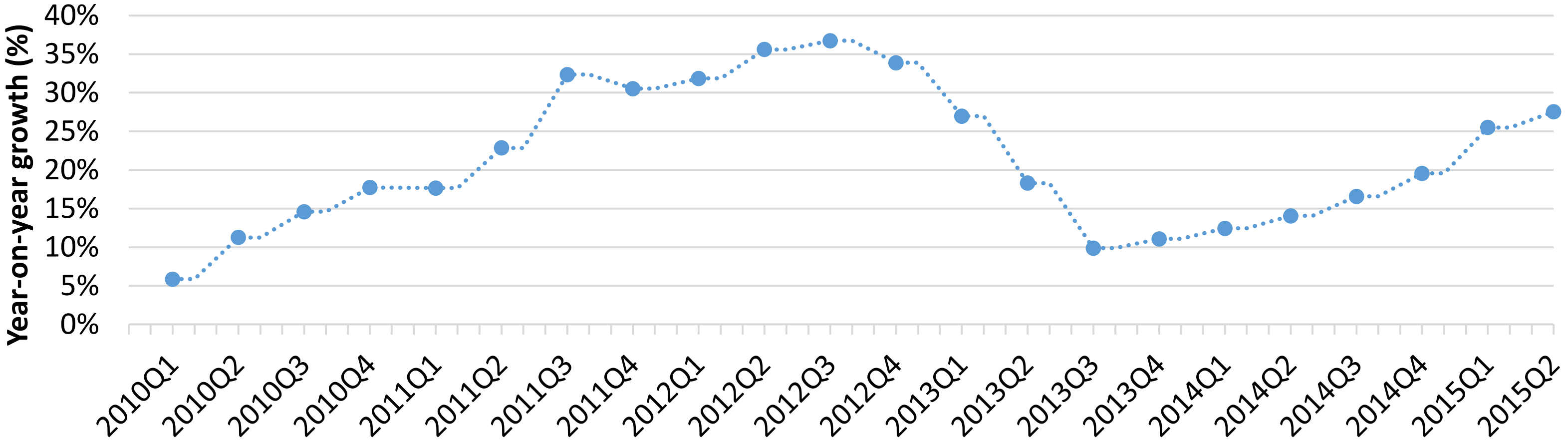
Short-term consequences

- **Fiscal impact of decline in grants** (cf. differences in original, revised and executed budget)
  - New civil service recruitment halted, new projects postponed or slowed down
  - Temporary increase in arrears, T-bill sales and use of BNR overdraft facility
- **Balance of payments impact**
  - Widening of current account deficit
  - Decrease in forex reserves and depreciation of RWF
- **Impact on public debt portfolio**
  - Postponement (increased size?) of maiden Eurobond
  - Increased T-bill issuance hindered maturity lengthening of domestic debt

Short-term consequences

Increased sale of T-bills induced higher rates and crowded out credit to private sector



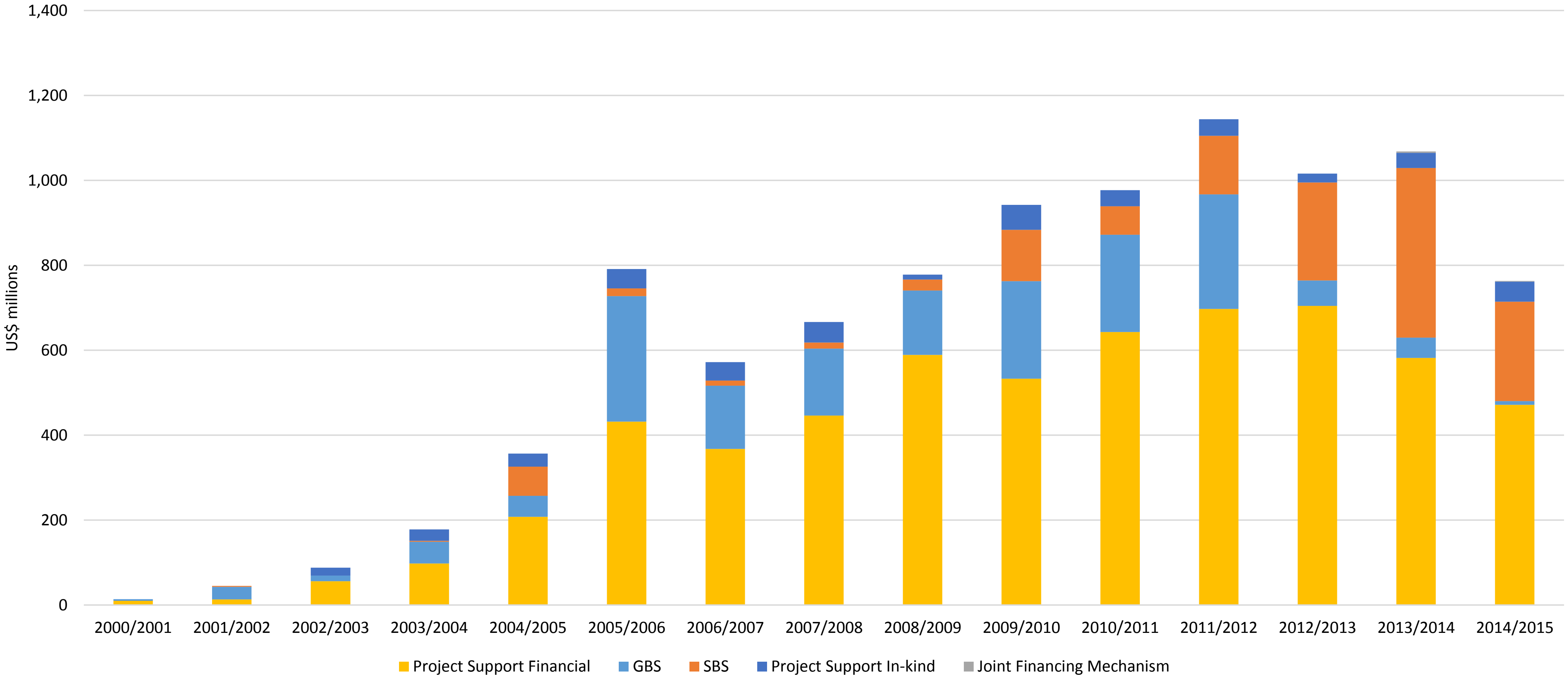


Longer-term consequences

- Following 2012 aid suspension **Rwanda and donors have reconsidered heavy reliance on GBS modality**
  - Rwanda asked donors to consider more predictable and reliable instruments
  - World Bank has not presented any new demands for GBS to Board; instead use of Program-for-Results (PforR)
  - DFID decided to discontinue GBS in Rwanda
- **Influence on high-level dialogue structures** between government and donors
  - Rwanda dissolved Budget support Harmonisation Group where general economic, fiscal and governance issues were discussed
  - New dialogue structures much more decentralised and/or narrower in scope

Longer-term consequences: aid modalities

Since 2012 aid suspension GBS has fallen out of grace in Rwanda



A broader view

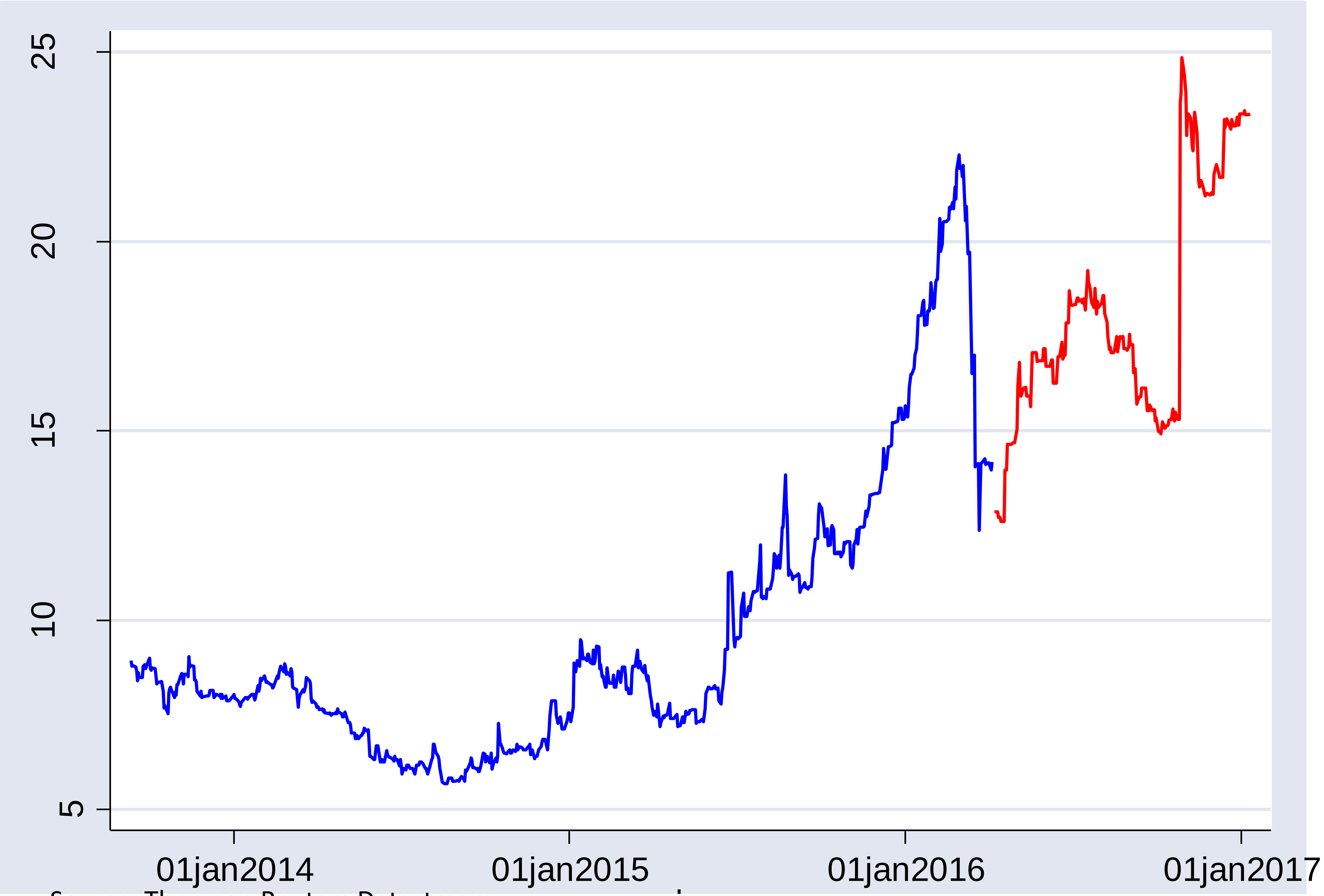
Eurobonds in SSA

- Since 2006, **16 SSA governments** (excluding South Africa) have issued Eurobonds, most of them first-timers: **‘beauty contest‘**
  - Belgian partner countries: RWA, SEN, TZA (floating rate note), MOZ
- Taken together about **US$29 billion** has been raised in SSA **34 issuances** since 2006, often with heavy oversubscriptions
- Investor appetite mainly fueled by **external ‘push’ factors**:
  - Record-low advanced country interest rates (‘search for yield’)
  - Commodity price recovery in aftermath of Great Recession
- **Great uncertainty about future trends** in interest rates and commodity prices!

Eurobonds in SSA

Sensitivity to external factors is clearly visible in secondary market yields (i.e., marginal cost of new borrowing), which follow common trend; but **country specifics ('pull' factors) seem to matter too**

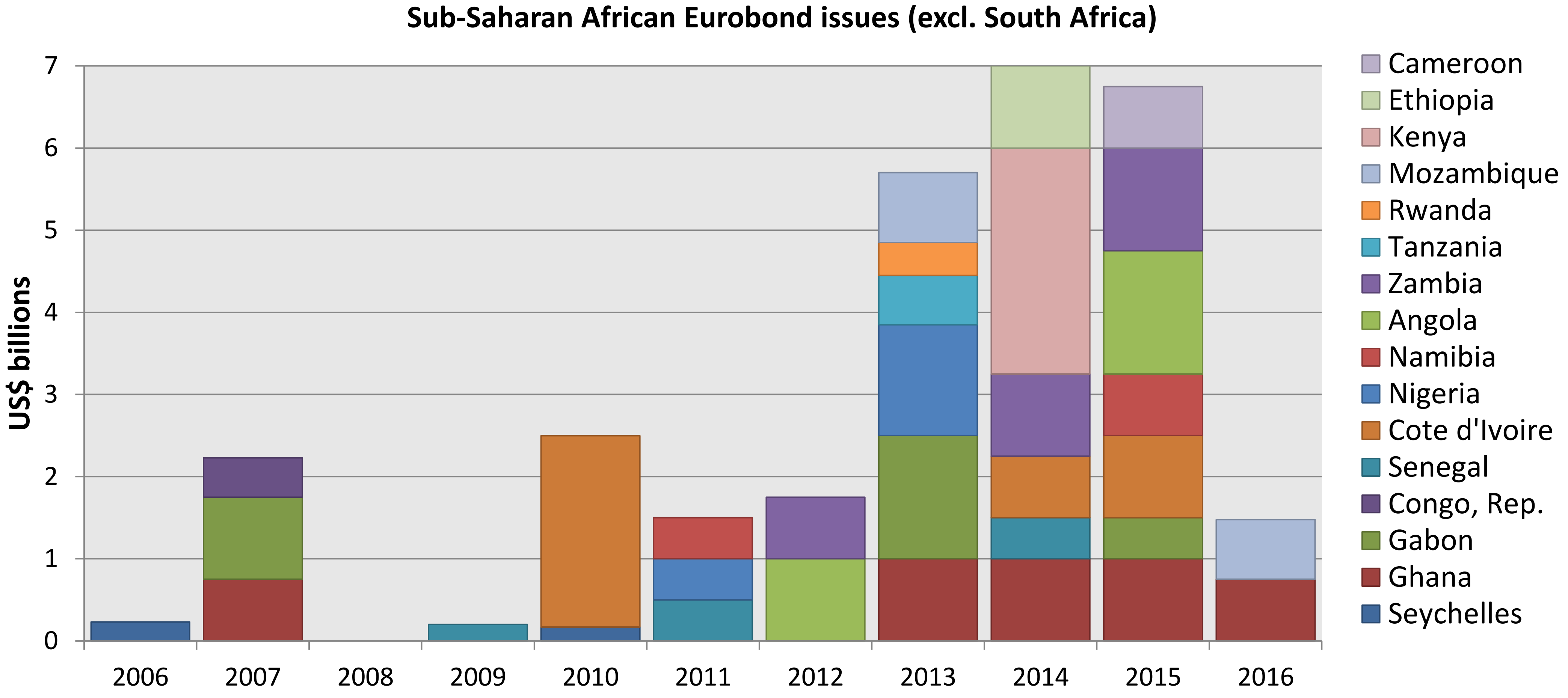
Mozambique EMATUM/Eurobond yields



Source: Thomson Reuters Datastream

Eurobonds in SSA

As US Federal reserve is set to tighten interest rates and Eurobond market sees new non-SSA players, is 'issuance window of opportunity' closing for SSA governments?



Implications of changing face of SSA debt

Transitioning to new ‘public debt regime’ entails adjustment costs and vulnerabilities

- From HIPCs to HICCUPs?
- Much will depend on project prioritisation, appraisal and execution

Lessons from Rwandan case

- Shows that prudent re-accumulation of public debt after relief is possible!
- Eurobond is an example of higher-risk but potentially rewarding strategy: focus on key vulnerabilities of the economy
- However, prudent borrowing did/will not shield Rwanda from occasional HICCUPs
- 2012 aid suspension illustrates how debt portfolio interacts with traditional donor aid

Public debt management is a complex matter

- A more diverse debt portfolio complicates requires making important trade offs: foreign versus domestic currency, conditionalities, etc.
- Debt (management) expertise should be scaled up both at the development partner and debtor government level

Implications of changing face of SSA debt

Role of traditional development cooperation is changing

- As a grant-only donor Belgium will see its financial importance/leverage diminish in most partner countries, due to increasing presence of other bilateral, multilateral and commercial creditors providing loans
- But a smart grant-only donor can still be relevant
- A donor as Belgium could try to smooth out some of the problems with transitioning towards new public debt regime
  - Frontloading of aid towards deserving projects (including those that generate forex)
  - Technical assistance in project appraisal
  - (Supporting) technical assistance in debt management
  - (Supporting) technical assistance in building local currency bond markets

Thank you for your attention

Questions?

danny.cassimon@uantwerpen.be

dennis.essers@uantwerpen.be

karel.verbeke@uantwerpen.be

www.befind.be

Terminology: Concessionality

- The degree to which the loan looks like a grant: grant element (%)
- To calculate the GE we need the present value of the debt:

$$PV\ of\ debt = \sum_{t=0}^{n} \frac{principal\ repayment_t + interest\ payment_t}{(1+discount\ rate)^t}$$

Present value is lower

the lower the interest rate

the longer the maturity

the longer the grace period

- Grant element = (Nominal value – Present value)/Nominal value
  - GE varies between 0% (commercial loan) and 100% (pure grant)
  - All debt lies somewhere in between these two extremes

(Fiscal) debt dynamics

- Conventional public debt dynamic analysis, starting from budget identity, is basically detemined by combination of two terms, the endogeneous dynamics of debt plus primary fiscal balance (both expressed as ratio to GDP).
- In equation form: $\Delta d = [(r - g)/(1 + g)]d_{t-1} - fb^{*}$

  with d = debt-to-GDP ratio,
  r = (weighted average) real interest rate on public debt
  g = real GDP growth rate
  fb* is the primary fiscal balance (as % of GDP)

- So d declines when:
  - growth rate higher than interest cost (stop 'snowball')
  - primary fiscal surplus
  - [there is debt relief/restructuring)]

Future debt sustainability in Rwanda

- Public debt-generating factors
  - Most important factors contributing to public debt stock evolution in Rwanda:

    \- Growth

    \- Privatization receipts

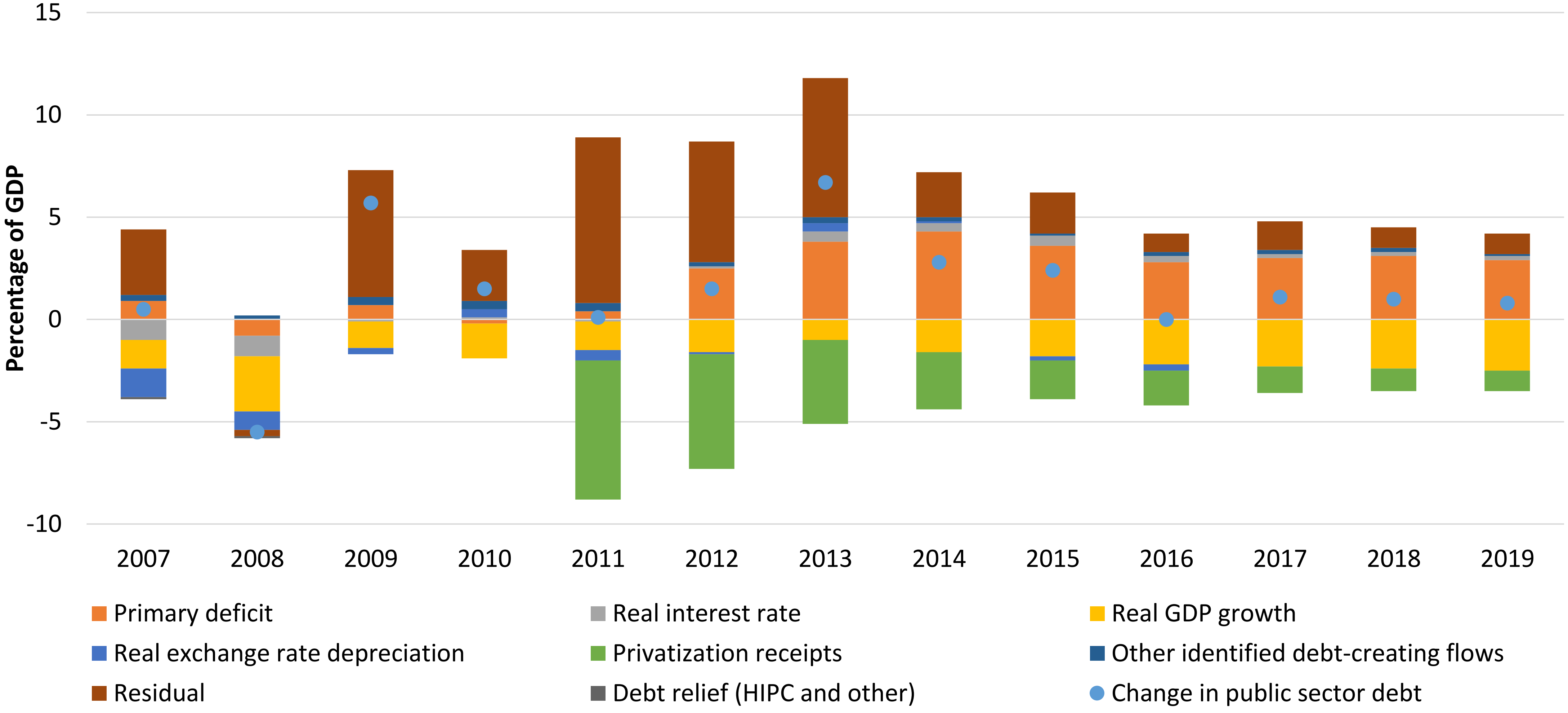
    \+ Real interest rate (concessional borrowing)

    \+ Primary deficit

    \+ Residual

Future debt sustainability in Rwanda

- Contribution to changes in public debt (2007-2019, proj. since 2014)



Mozambique debt distress

- In 2013, Mozambique borrowed US$850 million from Credit Suisse and VTB, ostensibly to fund the purchase of a tuna fishing fleet, through special-purpose company Ematum; loan was securitised and sold on to investors
- Soon it turned out Ematum was empty box and money was largely spent on patrol boats and military hardware
- Largely due to falling commodity prices Mozambican forex reserves dwindled and metical depreciated (>40% over Jan-Oct 2016)
- Mozambique surprised investors in March 2016 with restructuring of Ematum bond into conventional Eurobond (NPV neutral/positive restructuring: principal repayments postponed but high coupon)
- Just after restructuring journalists uncovered two previously undisclosed loans for maritime security, contracted by MAM and Proindicus from Credit Suisse and VTB with an (unconstitutional) sovereign guarantee
- In response IMF terminated SCF arrangement and donors withheld all budget support
- An independent audit of Mozambican debt and of the three deals (Ematum, MAM, Proindicus) has been ordered
- Role of Credit Suisse and VTB under investigation by supervisory authorities in London and New York
- In December 2016 Mozambican government declared it would need to restructure its Eurobond and on 18 January 2017 missed its very first US$60 mn coupon
- Some investors formed a creditor committee but refuse to negotiate before audit is published and IMF endorses debt figures
- Gross public debt estimated to be at least 130% end-2016, from official 40% in 2012