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# The changing face of Rwanda's debt

Danny Cassimon, Karel Verbeke, Dennis Essers

**Acropolis-BeFinD, Belgian Embassy Kigali**

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# Structure of the presentation

- Basic concepts on public debt
- Debt sustainability and the joint IMF/WB framework
- Reflections on debt diversification
- Evolution of Rwandan public debt after relief
- Rwandan debt sustainability
- Debt management
- Operational implications

# Some basic concepts on public debt

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

PPG debt: all debt owed by the Rwandan government to various creditors

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

# Some basic concepts on public debt

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

$$PV \text{ of debt} = \sum_{t=0}^n \frac{\text{principal repayment}_t + \text{interest payment}_t}{(1 + \text{discount rate})^t}$$

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
  - The GE varies between 0% (commercial loan) and 100% (pure grant).
  - All debt lies somewhere in between these two extremes.

# Some basic concepts on commercial public debt

- Tradable government debt
  - Treasury bills: maturity up to 1 year
  - Treasury bonds: maturity >1 year
- Non-tradable government debt: e.g. central bank advances
- Primary market: domestic issuance of treasury bonds and bills through auctioning (BNR)
- Secondary market: trading of treasury bonds on RSE
- Commercial creditors:
  - Commercial banks
  - Institutional investors: RSSB, Private pension and insurance firms, Agaciro
  - Retail/small investors: individuals/grouped in SACCOs
- Special case: 'Eurobond'
  - International bond issued in foreign currency, e.g. USD-bond of Rwanda

<b>Instrument Nr.</b>	<b>Instrument Type / Name</b>	<b>Concessional / Mkt instrument</b>	<b>Maturity (y)</b>	<b>Grace (y)</b>	<b>Nominal IR</b>
USD_1	IDA	Concessional	40	10	0.75%
USD_2	AfDF	Concessional	50	10	0.75%
USD_3	Multilateral-Fixed	Concessional	30	10	1.75%
USD_4	Bilateral-Fixed	Concessional	20	5	2.00%
USD_5	Eurobond	Mkt	10	0	8.00%
RWF_6	MARKET-T-bill	Mkt	1	0	9.00%
RWF_7	MARKET -Tbond 2&3 yrs	Mkt	3	9	11.00%
RWF_8	MARKET -T-bond 5yrs	Mkt	5	4	12.25%
RWF_9	Non- MARKET	Mkt	20	0	8.00%
RWF_10	MARKET -T-bond 7yrs	Mkt	7	0	14.00%
RWF_11	MARKET -T-bond 10yrs	Mkt	10	0	16.00%

# 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.

- To assess the debt burden, we look 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 compare this ratio to sustainability thresholds.

# The joint IMF/WB DSA/DSF framework

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

1. Deciding on the 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 the medium and long term;
3. Running stress tests using detailed alternative scenarios, tailored to relevant country vulnerabilities;
4. On the basis of 1-3: finally assess the level of (risk of) debt distress, into 'low', 'medium', or 'high level of debt distress'

**Follow-up:** Translating debt sustainability assessment into suggestions for future additional borrowing policies, e.g. minimum level of concessionality (grant element) in new borrowing, or other types of 'debt limits' in IMF programs



# The 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
<b>HIPC</b>			150	250		
<b>CPIA <math>\leq</math> 3.25</b>	Weak	30	100	200	15	18
<b>3.25 &lt; CPIA <math>\leq</math> 3.75</b>	Medium	40	150	250	20	20
<b>CPIA &gt; 3.75</b>	Strong	50	200	300	25	22

# Some reflections on debt diversification

- Traditionally, external financing has occurred through aid in grants, as well as through highly concessional loans from multilaterals and bilaterals, that constituted the lion share of Rwanda's public debt stock
- Key characteristics of **official grants and highly-concessional loans**
  - + Increase of scarce foreign exchange at inflow
  - (limited) exchange rate risk for loans
  - donor conditionalities
  - volatile and unpredictable
  - ? Ultimate net foreign exchange generation (linked a.o. to conditionality)
- Access will (gradually) diminish as Rwanda develops; traditional and emerging donors move to less concessional finance;
- and willingness by Rwandan authorities to accept them decreases, opening the door for other financing options;

# Some reflections on debt diversification

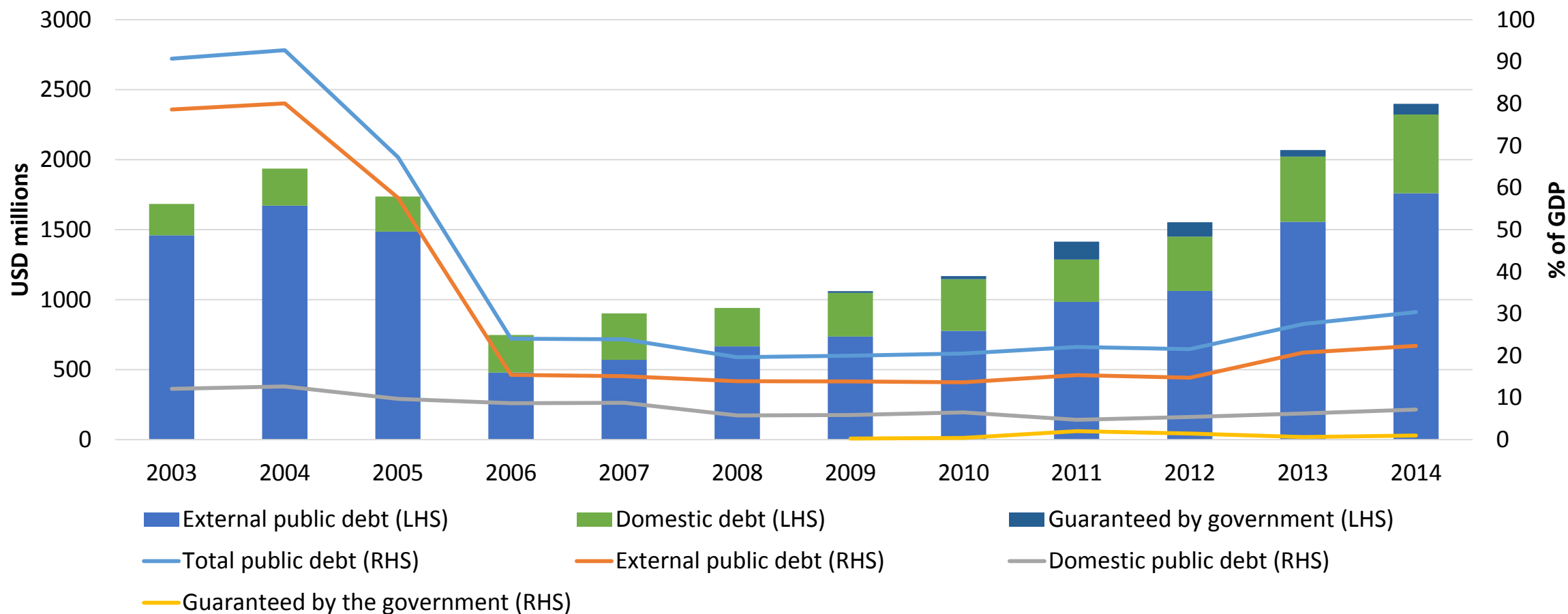
- Different non-concessional alternatives with their own risks:
  - **External commercial creditor public debt** (like Eurobond):
    - + Relatively cheap (but this is changing)
    - Exchange rate risk
    - Refinancing /redemption risks (bullet repayment)
    - Exposure to external shocks
  - **Domestic public debt** (bills/bonds/central bank advances):
    - + No exchange rate risks
    - + Positive spillovers for financial market development, monetary policy and accountability
    - Higher real interest rates
    - Interest rate/refinancing risks (because of shorter duration)
    - Potential negative externalities if concentrated with commercial banks (crowding out of private sector credit and interlinkages between sovereign and bank balance sheets)

# Evolution of Rwandan public debt after relief

- Timing HIPC-MDRI
  - Decision point: December 2000
  - Completion point: April 2005
  - MDRI: December 2005
- Increase in debt stock after completion point
  - In nominal terms, overall Rwandan public debt stock now higher than before debt relief
  - However, in relative terms increase in debt stock has been limited
  - Rwanda has smallest public debt stock (in % of GDP) of all EAC countries
  - Relative increase in *domestic* public debt (partly due to relief on *external* public debt)

# Evolution of Rwandan public debt after relief

- Evolution of **public debt stock** (2003-2014)



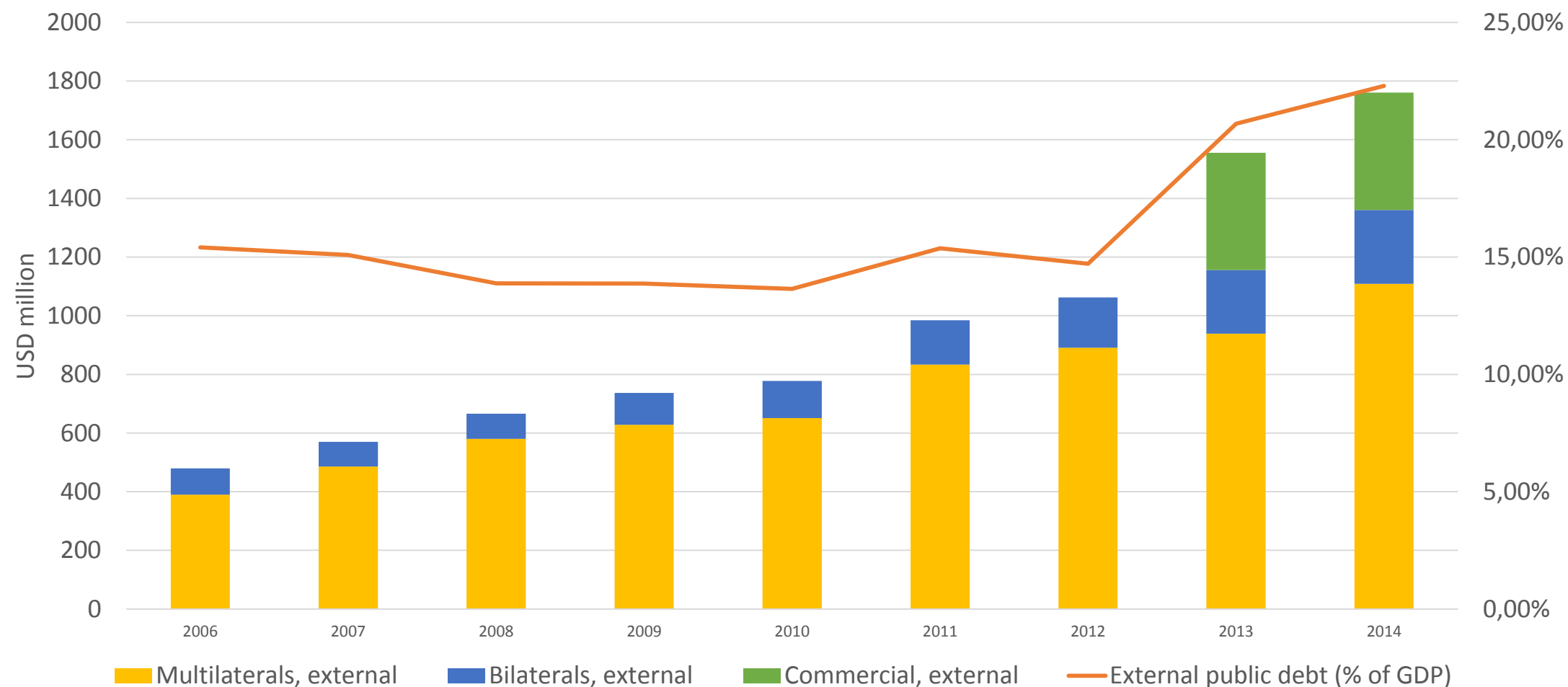
Source: MINECOFIN

# External public debt

- HIPC reduced the overall stock of external debt
- Following HIPC: increased diversification of external debt: commercial debt, new bilateral donors (e.g. India, China, Kuwait, Saudi)
- Multilateral debt:
  - IDA and AFD are the main multilateral donors
  - Given low risk of debt sustainability, Rwanda will receive a growing share of its financial assistance in the form of loans (see e.g. IDA). Certain bilateral donors might follow this policy (but not yet)
- Bilateral debt
  - China, India, Kuwait and Saudi Arabia are the main bilateral creditors.
- Commercial debt
  - Eurobond issued in 2013

# External public debt

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



Source: MINECOFIN

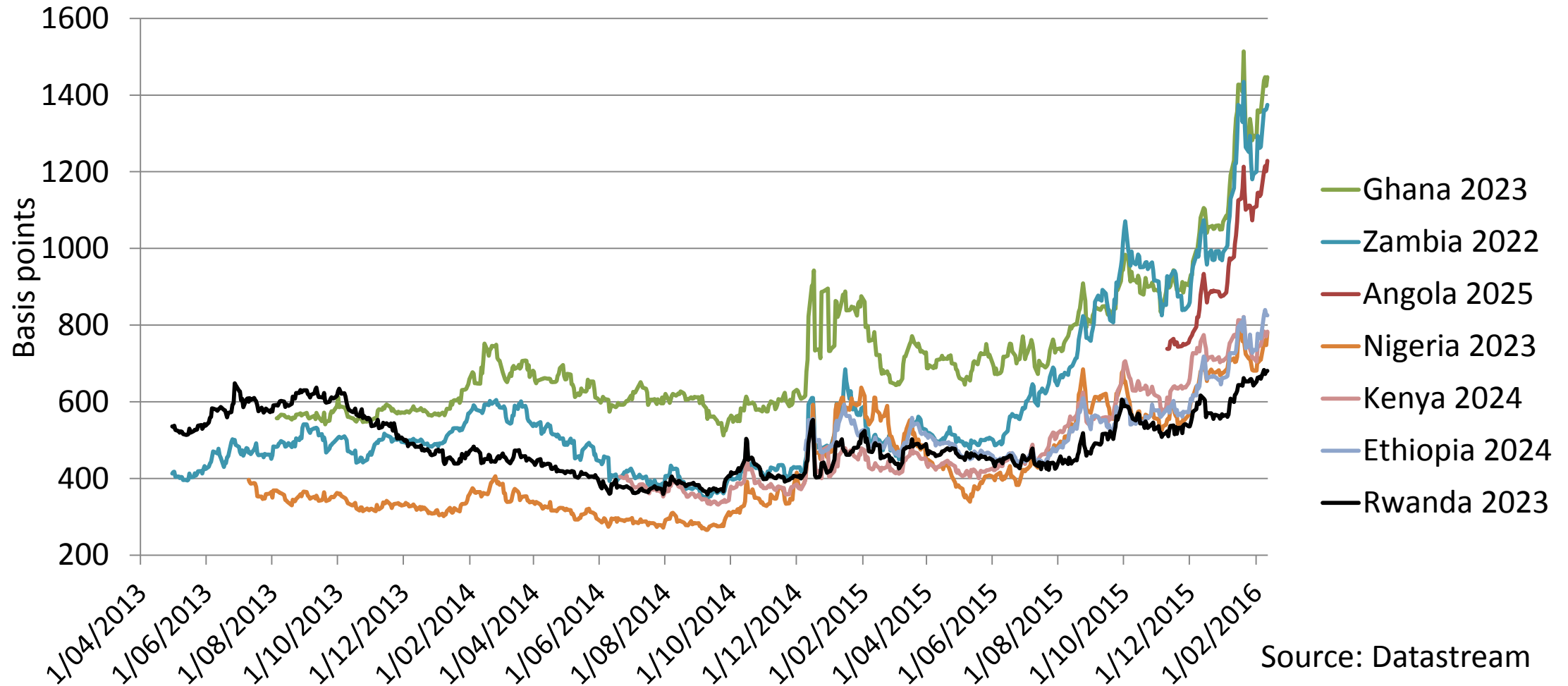
# External public debt: commercial

- On 25 April 2013 Rwanda's debut 10-year US\$400 million Eurobond went to market with a coupon of 6.625% and B rating from S&P and Fitch
- Total Eurobond order book of US\$3.5 billion (8.5 X oversubscribed) with investors from US/UK/CH/Asia/BE/LX/DE (mostly fund managers)
- According to prospectus, Eurobond proceeds were to be spent on
  - Repaying outstanding loans on Kigali Convention Centre (US\$120M)
  - Completion of construction of Kigali Convention Centre (US\$150M)
  - Repaying outstanding loan on RwandAir development plan (US\$80M)
  - Financing Nyabarongo hydro power project (US\$50M)
- 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 and Angola (see next slide)
  - Because prices for Rwanda's main exports (coffee, tea, cassiterite, coltan) have declined less than prices of oil, natural gas, copper, etc.
  - Because of Rwanda's relatively low level of debt and low risk of debt distress (cf. DSA)
  - Because of Rwanda's reputation of being an efficient bureaucracy and clarity about the use of the Eurobond proceeds



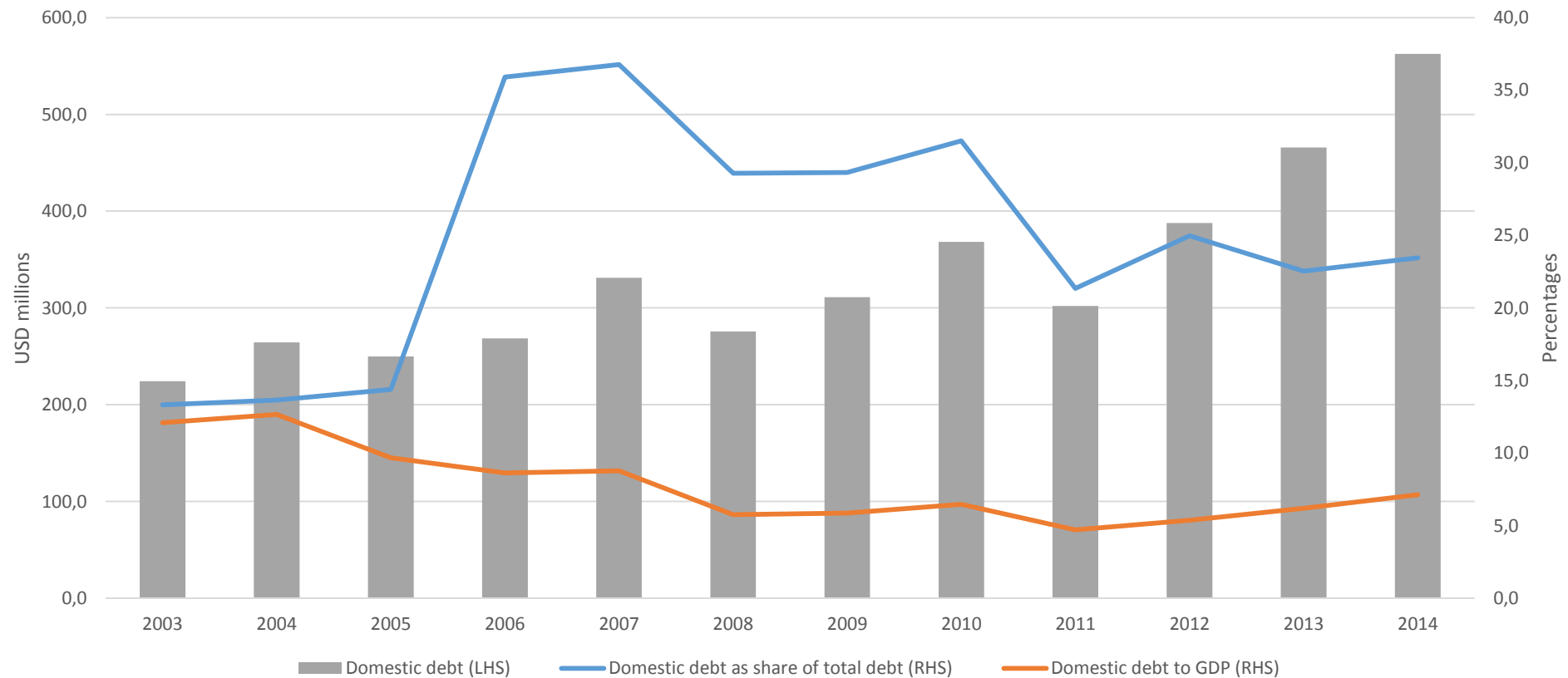
# External public debt: commercial

- Evolution of Eurobond yield spreads (over US Treasuries): Selected African issues



# Domestic public debt

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



# Domestic public debt

- Rwanda's domestic public debt mainly exists of:
  - BNR advances
  - Treasury bills and bonds (issued for infrastructure investment/deficit financing and capital market development)
- Promotion of an active domestic public debt market is one of objectives of Rwandan debt management
- Average term to maturity of domestic debt has declined from 5 to 3.7 years over June 2012 - June 2014, due to increased issuance of T-bills in wake of aid suspension
- Main bill and bond investors are:
  - Local banks (now 11 commercial banks + 1 development bank)
  - Institutional investors: pension and life/non-life insurance funds (dominated by Rwanda Social Security Board or RSSB; 'captive investor')

# Domestic public debt: local currency bonds

- Primary market
  - Weekly issuance of T-bills of 28-91-182-364 days
  - Quarterly issuance (since Feb 2014) of T-bonds of 2-3-5-7-10 years (15 years expected in May 2016)
  - Since 2008: 17 T-bonds totalling FRW 141.8 billion
  - Anyone with Central Securities Depository (CSD) account at BNR can bid
  - BNR determines coupon rate and weighted average yield based on competitive bids (>FRW 50 million)
  - Smaller (non-competitive) bidders are price-takers and are served first
  - Minimum denomination is FRW 100.000
- Secondary market
  - Post issuance T-bonds are listed on the RSE (regulated by CMA), although almost no trading occurs

# Domestic public debt: local currency bonds

- EAC regional integration of bond markets
  - Economies of scale through sharing of market infrastructure and intermediation services (like brokers)
  - Access to broader investor base (lower costs and more stable?): especially Kenyan/Ugandan pension funds and other institutional investors may offer opportunities for Rwanda
  - This requires removing cross-EAC investment barriers, e.g. withholding tax
  - Costly currency conversions may hamper integration
- Other initiatives taken:
  - CMA is working towards a 10Y Capital Market Master Plan
  - In May 2014 IFC issued a 5Y FRW15 billion 'Umuganda' bond ; it is listed on the RSE
  - Recent creation of Rwandan National Investment Trust, an investment vehicle that would help to mobilise small-scale savings

# Domestic public debt: local currency bonds

- Yield curve on 28/01/2016



Source: BNR

# Future debt sustainability

- IMF debt limits policy: limits on debt accumulation in countries with IMF-supported programs (e.g. Rwanda PSI).
- Twin goal: debt sustainability over the medium term, while allowing adequate external financing.
- 2009 and 2014 reforms:
  - More comprehensive: total public debt, not only external
  - An integrated treatment of concessional and non-concessional external debt
  - Closer link between public debt vulnerabilities and limits.
  - More attention given to fiscal and monetary capacity (in case of high or medium risk)
  - No limits on external public debt for countries with low risk of external debt distress.
- For Rwanda: currently only indicative targets, e.g. on new non-concessional external debt of non-financial public enterprises.

# Future debt sustainability

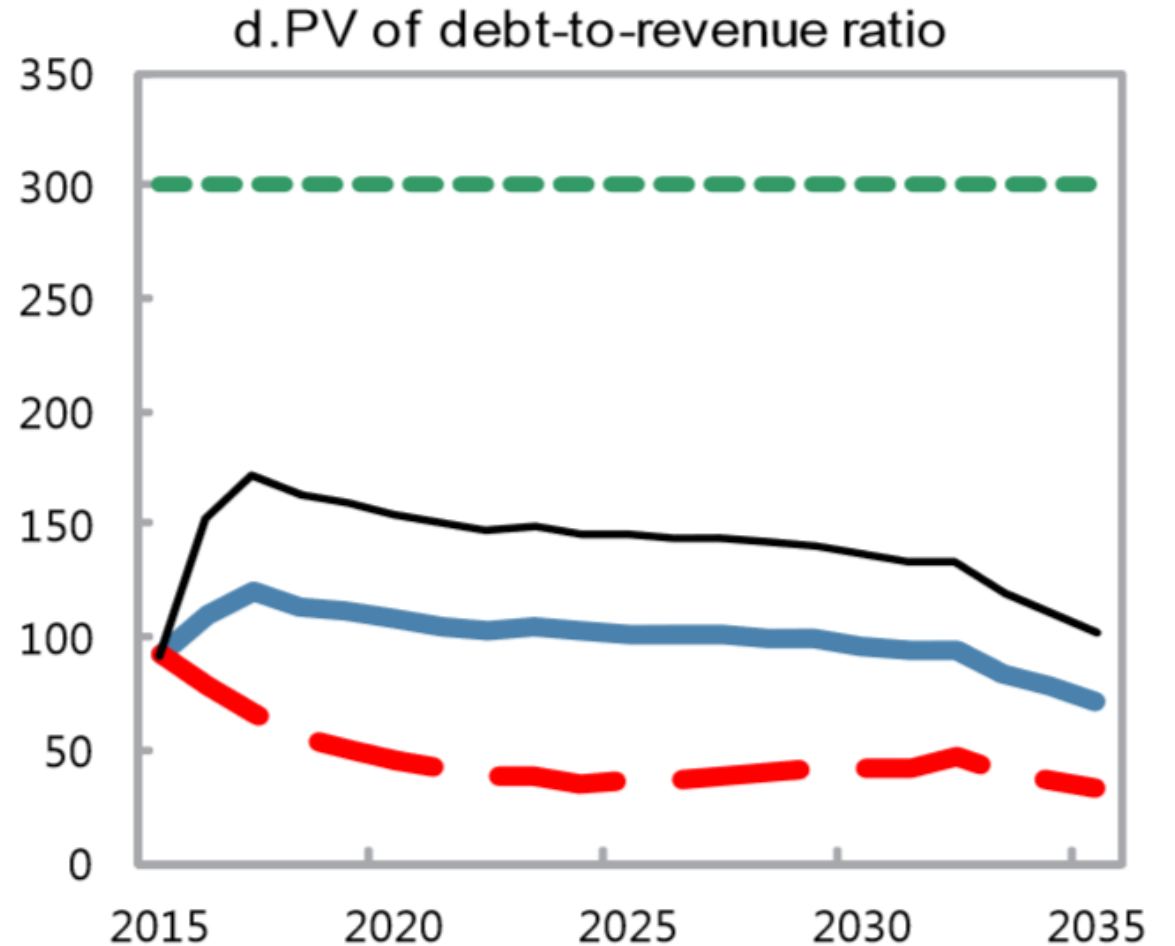
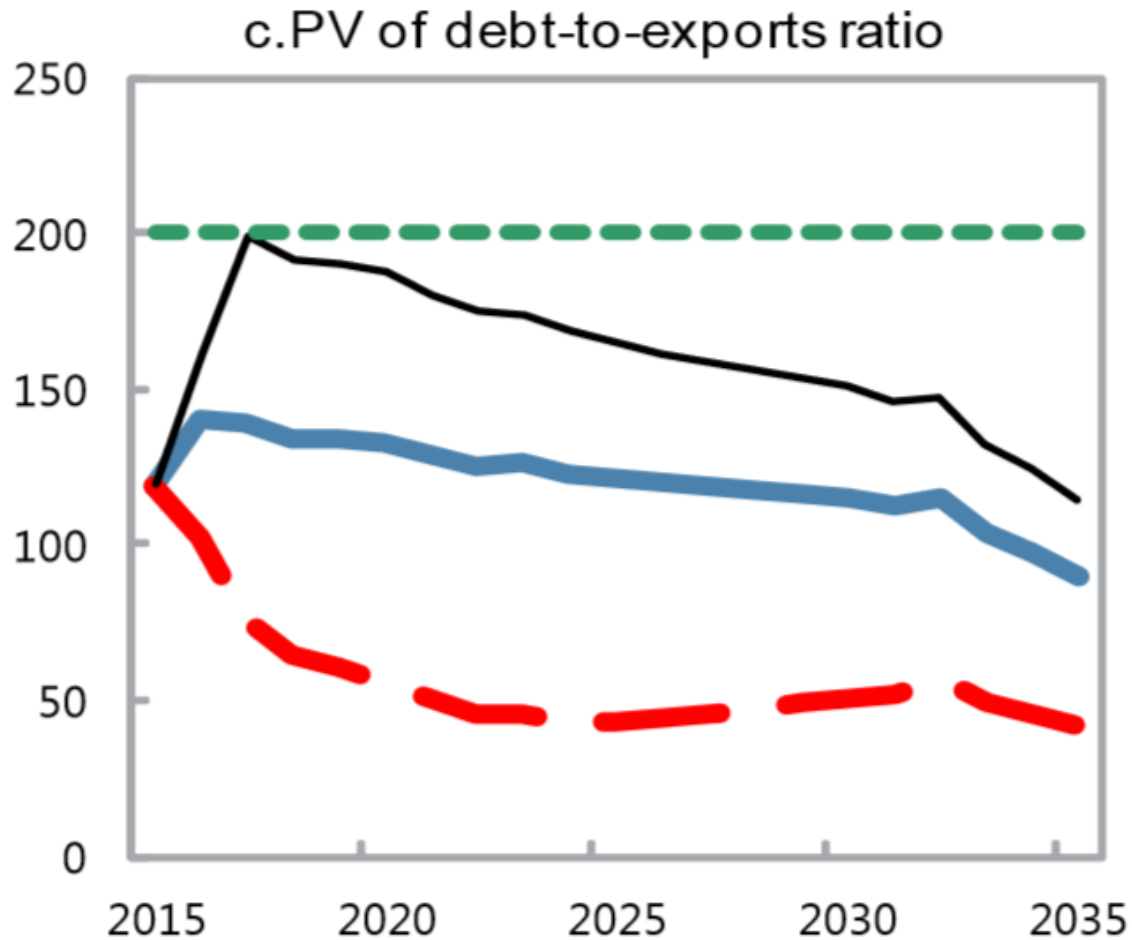
- Joint World Bank-IMF DSA
  - Rwanda is currently classified as having a **low risk of debt distress**:
  - All debt indicators are below standard thresholds, except for debt service in 2023 (Eurobond bullet repayment)
- Risk indicators of public debt: slight deterioration over 2012-2014

	Jun-12			Jun-14		
	External debt	Domestic debt	Total debt	External debt	Domestic debt	Total debt
Amount (in millions of USD)	1,233.2	250.2	1,483.4	1,745.4	541.4	2,286.77
Nominal debt as % GDP	18.9	3.8	22.8	24.2	7.5	31.8
<b>Sustainability</b>						
PV as % of GDP	12.8	3.8	16.6	17.3	5.4	22.7
PV as % of Exports	110.0	...	...	94.0	...	...
Weighted Av. IR (%)	0.9	7.2	1.9	2.5	8.2	3.8
<b>Refinancing risk</b>						
ATM (years)	15.3	5.0	13.5	15.0	3.7	12.5
Debt maturing in 1yr (% of total)	6.3	45.5	12.9	1.6	63.0	15.4
<b>Interest rate risk</b>						
ATR (years)	15.3	5.0	13.5	15.0	3.7	12.5
Debt refixing in 1yr (% of total)	6.3	45.5	12.9	1.6	63.0	15.4
Fixed rate debt (% of total)	100.0	100.0	100.0	100.0	100.0	100.0
<b>FX risk</b>						
FX debt (% of total debt)			83.1			77.5



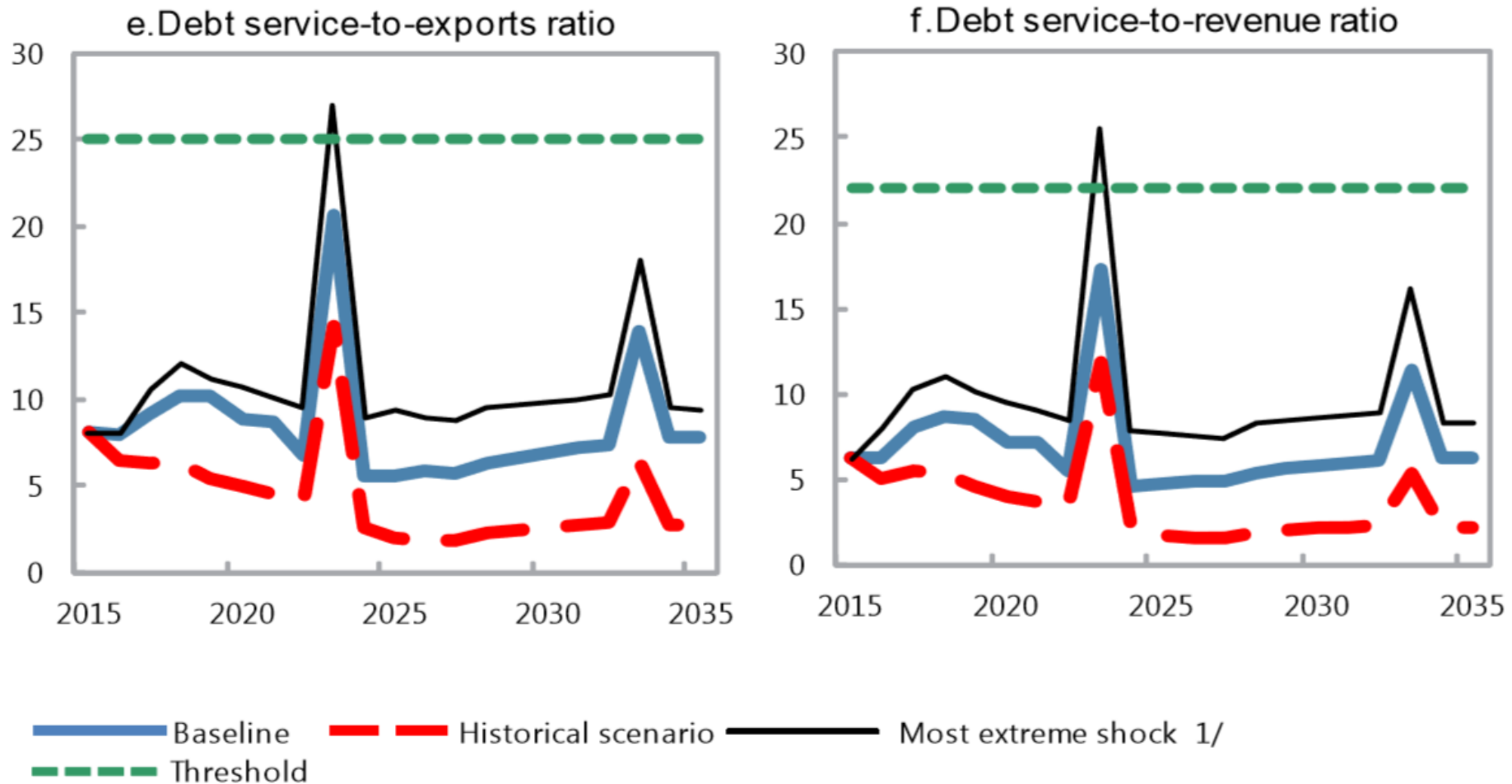
# Future debt sustainability

- External public debt stock indicators (under various DSA scenarios)



# Future debt sustainability

- External public debt service indicators (under various DSA scenarios)



# (Fiscal) debt dynamics

- Conventional public debt dynamic analysis, starting from the budget identity, is basically determined by the combination of two terms, the endogenous dynamics of debt plus the primary fiscal balance (both expressed as a 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 reducing  $d$  is happening when:
  - growth rate higher than interest cost (stop 'snowball')
  - primary fiscal surplus
  - [reduction of  $d$  through debt relief (debt restructuring)]

# Future debt sustainability

- Public debt-generating factors
  - Most important factors contributing to public debt stock evolution:
    - Growth
    - Privatization receipts
    - + Real interest rate (concessional borrowing)
    - + Primary deficit
    - + Residual

# Future debt sustainability

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



# Debt management/policy

- Rwanda has high score for 'debt policy' dimension of CPIA (4/6)
- Debt Management Unit set up in 2014: integrating middle (strategy and analysis) and back (data recording and reporting) office.
- Front office (mobilization and contracting) is still done by the external finance unit (Minecofin) and BNR.
- Rwanda is finalizing a new DeMPA+reform plan.
- Rwanda has developed a medium-term debt management strategy (MTDS 2015/16 - 2017/18)
  - Evaluation of goals set in previous MTDS (2011/12 - 2013/14): objectives achieved except for one: *'reduced reliance on short term notes in favor of longer-term domestic debt'* (due to 2012 aid suspension and increased issuance of bills)

# Operational implications

- Public debt management is a highly technical issue:
  - Important to listen to learn from the existing expertise
  - Given more complex debt mix, expertise should be scaled up both at the development partner and government level.
- Additional public debt issuance should be targeted to resolving key vulnerabilities of the economy
  - Transition to the new public debt regime entails adjustment costs and vulnerabilities
    - Prudent public borrowing policy does not shield Rwanda from these costs.
    - Staying in the old debt-regime is no alternative
    - Especially the Eurobond is an example of a higher risk but potentially rewarding strategy
    - Going from HIPC to HICCUPS?
    - A lot will depend on the prioritisation, appraisal and execution of project
- The role of development cooperation is changing
  - Rwanda wants to reduce reliance on donor aid and conditionalities
  - Belgium as a grant-only donor will become less important because of the increasing presence of other bilateral, multilateral and commercial creditors providing loans.
  - But a smart grant-only donor can still be relevant.
  - To the extent that good projects are financed, a donor as Belgium could try to smooth some of these transition problems as much as possible
    - frontloading of aid
    - Technical assistance in project appraisal, debt management capacity

THANKS FOR YOUR ATTENTION