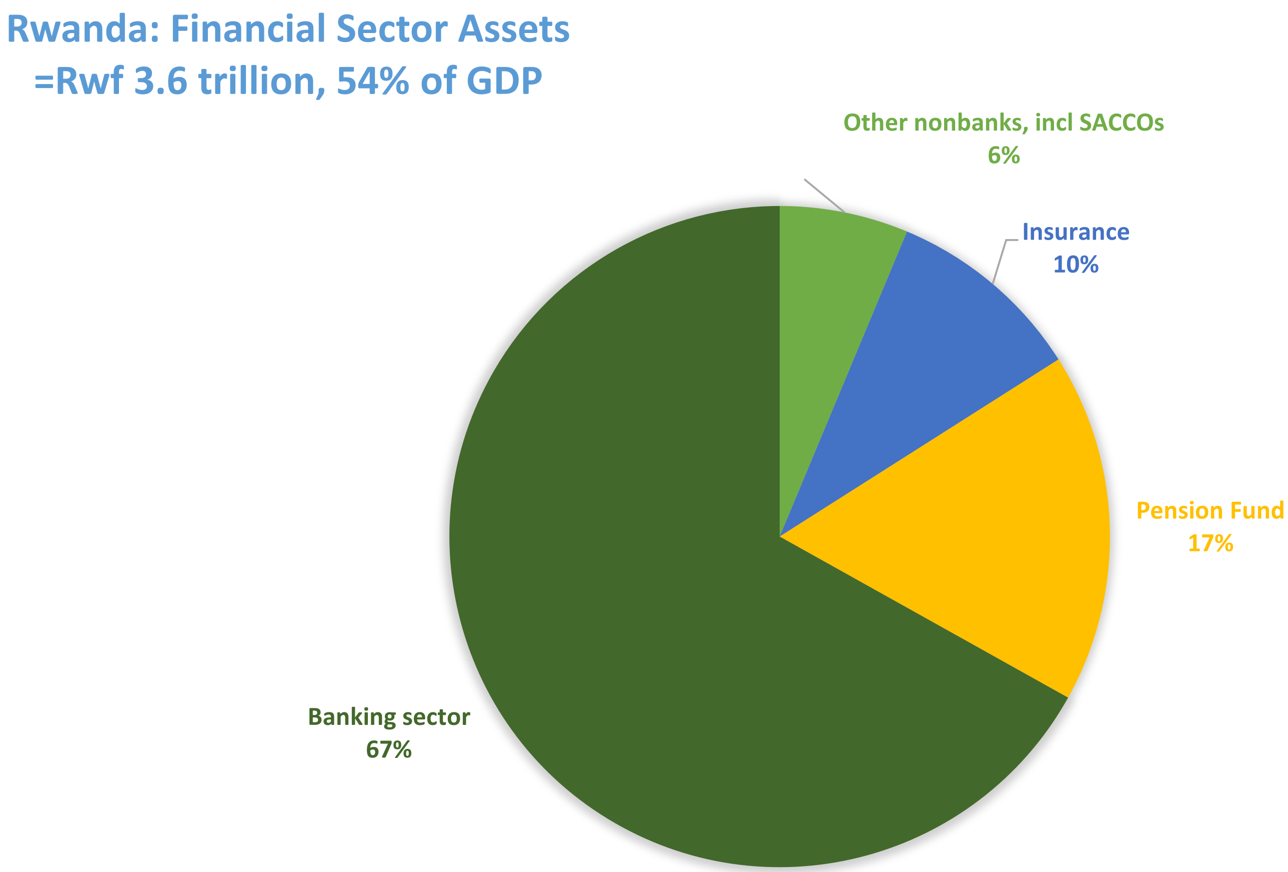
Linkages between Financial Services and Economic Activity in Rwanda

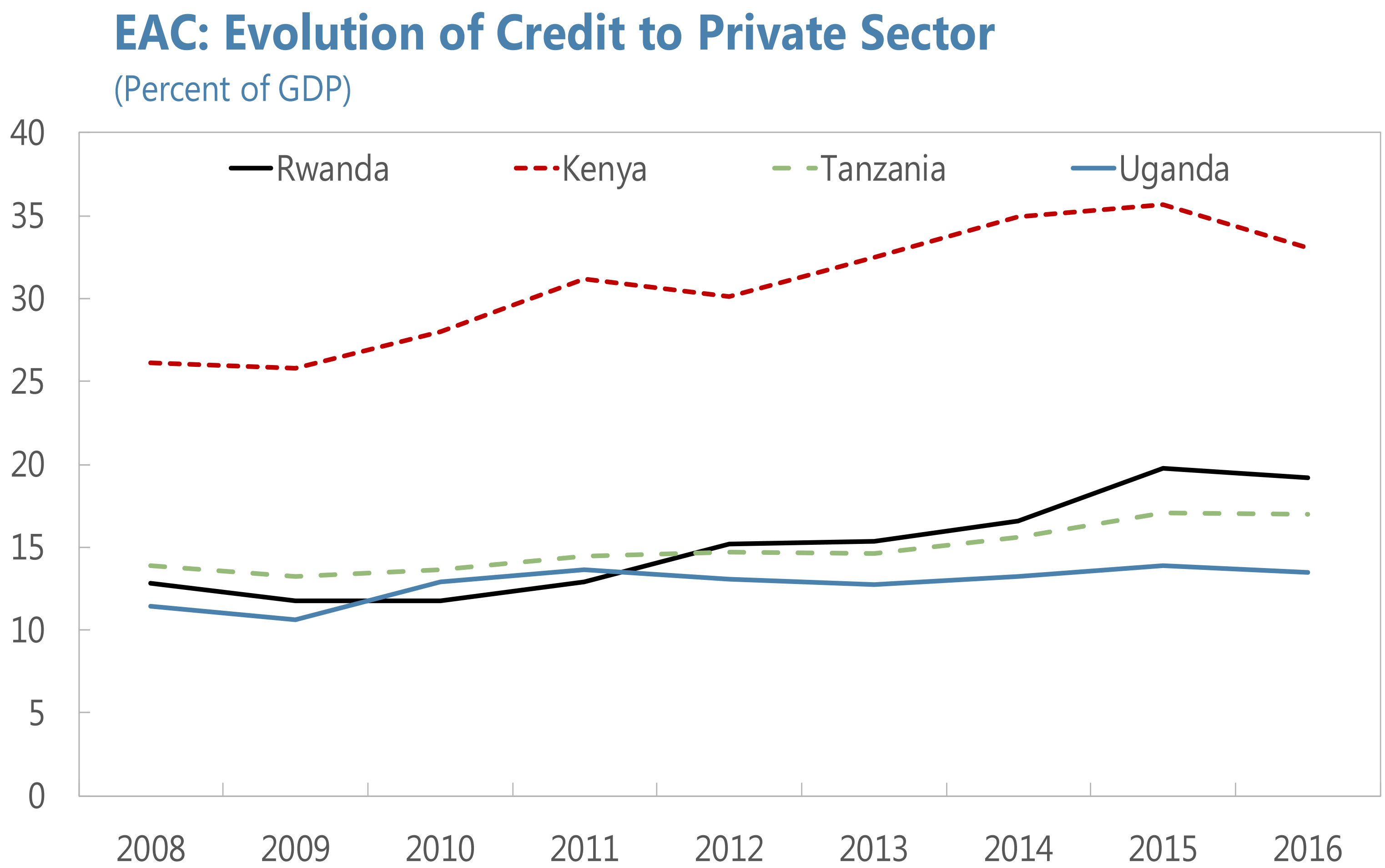
May 2017

(1) The Rwandan Financial System

Rwanda's financial system is dominated by banks



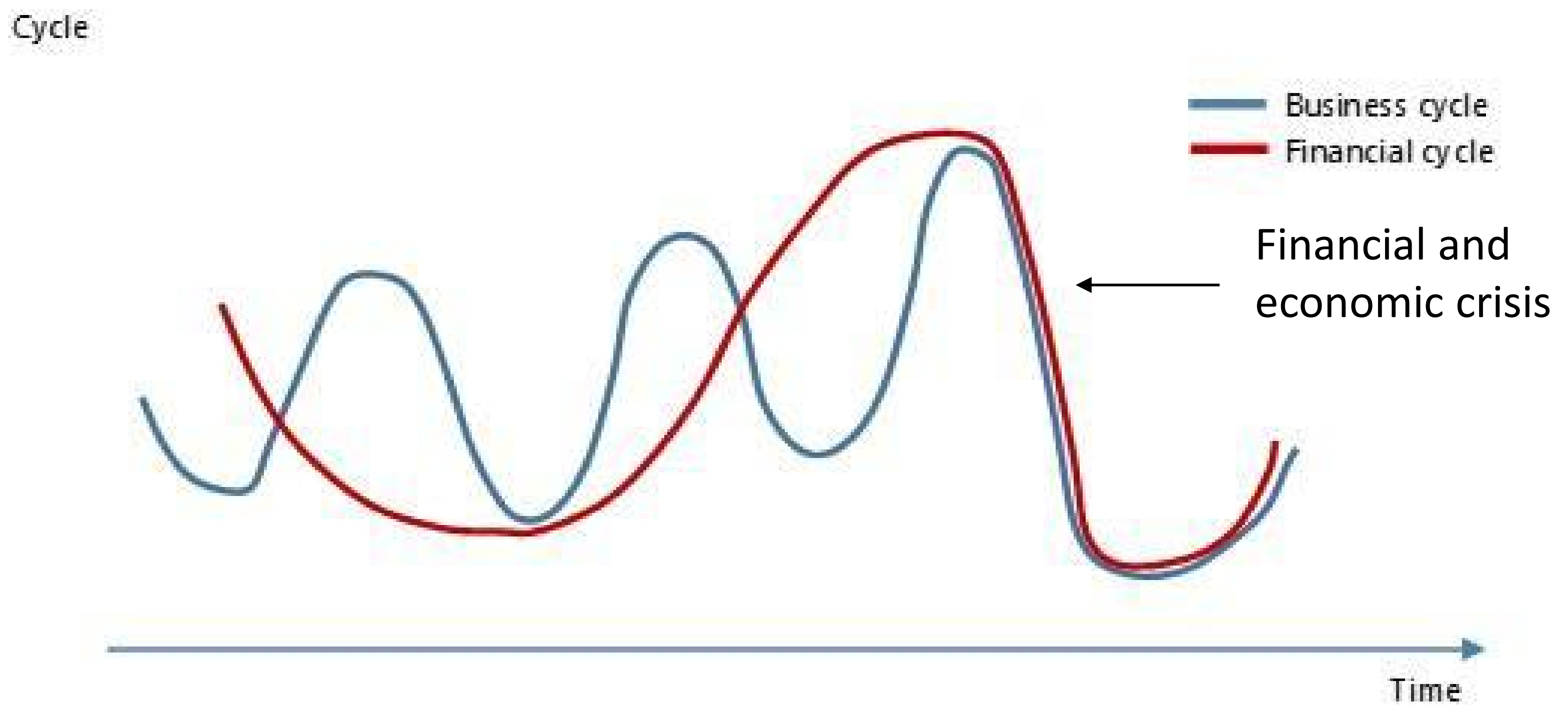
Rwanda: Private Sector Credit is becoming increasingly important to the economy



(2) Assessing Financial Sector Stability

Financial and Business Cycles

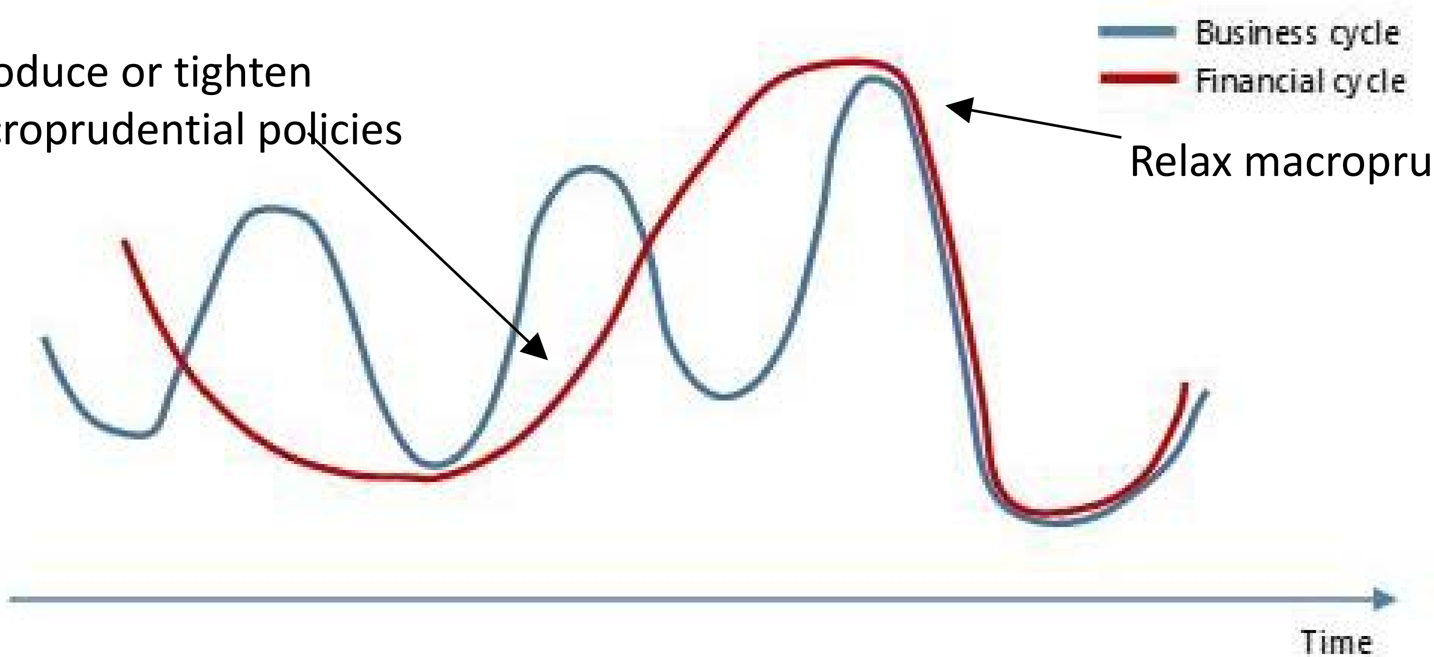
- Financial cycle = Fluctuations of credit and asset prices over time.



Financial and Business Cycles: Policy implications

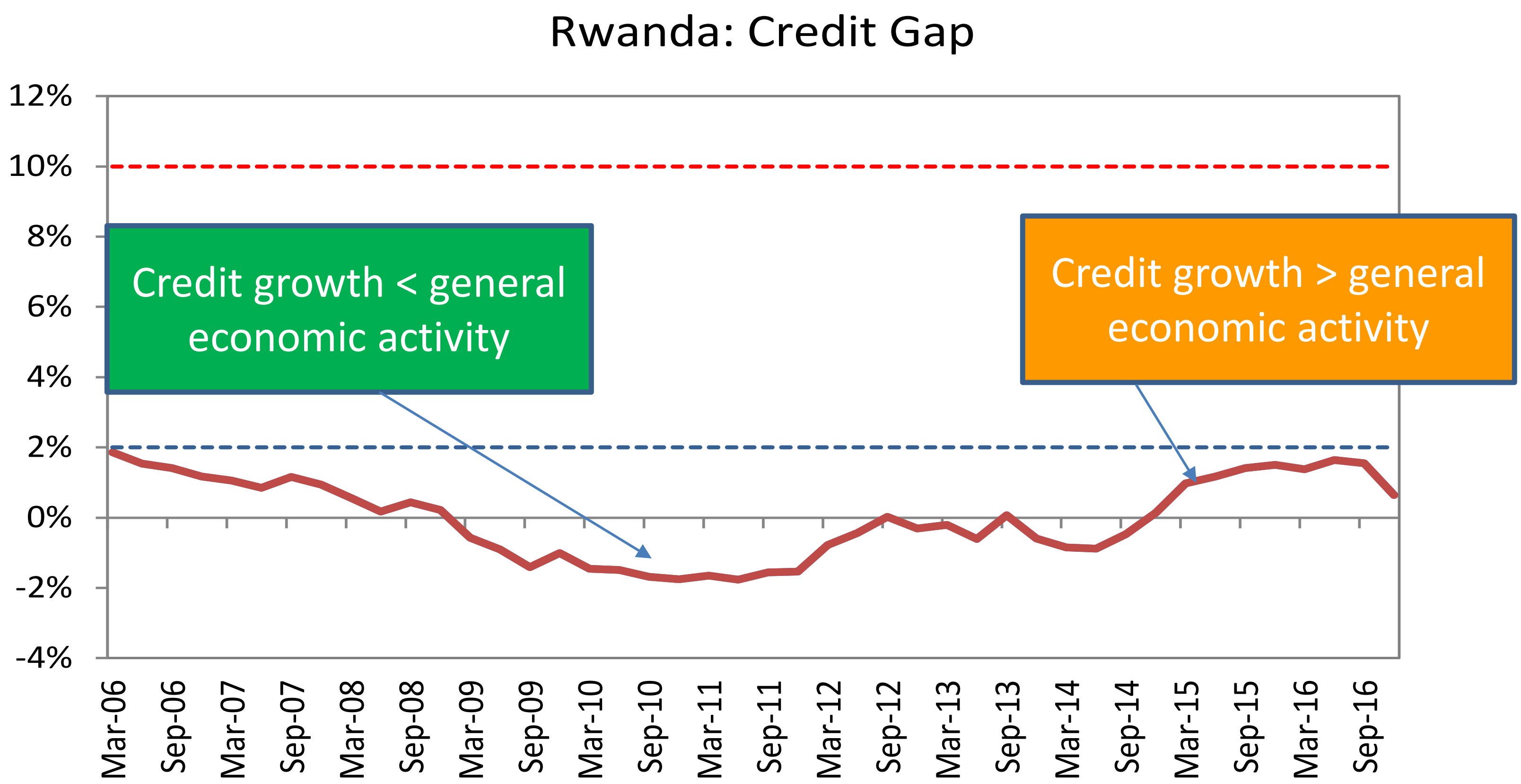
→ Use **change money supply conditions** to stabilize the business cycle.

→ Use **tools that limit e.g. the procyclicality of credit** to stabilize the financial cycle.



Analysis of the credit gap in Rwanda

Credit gap = deviation of actual credit-to-GDP from its long-term trend.



Banking Sector "Heat Map" based on financial soundness indicators

Country	2014Q4	2015Q4	2016Q4	Latest
Overall Financial Sector Rating	L	M	M	M
Credit cycle	L	L	L	L
Balance Sheet Soundness	L	M	M	M
Balance Sheet Structural Risk	L	L	L	L
Balance Sheet Buffers	L	M	M	M
Leverage	L	L	L	L
Profitability	L	L	L	L
Asset quality	L	H	H	H

L=low risk; M=medium risk; H=High risk

Banking Sector Heat Map for Rwanda

Rwanda	2014Q2	2014Q3	2014Q4	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	Latest
Overall Financial Sector Rating	L	L	L	L	L	L	M	L	M	M	M	M
Credit cycle	L	L	L	L	L	L	L	L	L	L	L	L
Change in credit / GDP ratio (pp, annual)	0.5	0.3	1.5	2.6	2.8	2.7	2.2	1.2	1.3	0.9	-0.1	-0.1
Growth of credit / GDP (%, annual)	3.6	1.7	10.3	17.7	19.0	17.2	13.2	6.9	7.1	5.1	-0.4	-0.4
Credit-to-GDP gap (st. dev)	-1.8	-1.1	-0.4	0.6	0.4	0.2	-0.1	-0.7	-0.4	-0.8	-2.2	-2.2
Balance Sheet Soundness	L	L	L	L	L	L	M	L	M	M	M	M
Balance Sheet Structural Risk	L	L	L	L	L	L	L	L	L	L	L	L
Deposit-to-loan ratio	130.9	125.4	117.4	121.9	122.0	125.1	120.3	118.8	120.0	106.7	116.8	116.8
FX liabilities % (of total liabilities)	27.7	26.0	30.2	23.7	23.3	28.5	23.4	23.2	25.0	27.0	28.4	28.4
FX loans % (of total loans)	3.0	3.6	7.2	5.4	6.2	6.7	9.6	12.1	13.4	11.6	9.9	9.9
Balance Sheet Buffers	L	L	L	L	L	L	M	L	M	M	M	M
Leverage	L	L	L	L	L	L	L	L	L	L	L	L
Leverage ratio (%)	12.9	13.4	13.7	15.4	14.2	14.1	14.1	15.6	14.7	15.5	14.5	14.5
Profitability	L	L	L	L	L	L	L	L	L	L	L	L
ROA	2.9	2.8	2.8	3.3	3.3	3.0	2.9	2.8	2.6	2.8	2.5	2.5
ROE	16.0	15.2	15.3	17.6	17.7	16.2	15.7	14.7	14.0	14.9	13.5	13.5
Asset quality	L	L	L	L	L	M	H	M	H	H	H	H
NPL ratio	5.3	5.3	5.2	5.7	5.5	5.8	6.3	6.5	7.6	8.1	7.6	7.6
NPL ratio change (%, annual)	-3.2	-11.2	-12.0	-2.8	4.5	10.2	20.2	15.0	37.5	39.3	21.3	21.3

Memo items:	2014Q2	2014Q3	2014Q4	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	Latest
Credit-to-GDP (%)	14.9	15.5	16.3	17.3	17.7	18.2	18.5	18.5	19.0	19.1	18.4	18.4
Credit-to-GDP gap (%; HP filter)	-0.2	0.2	0.9	1.8	2.1	2.4	2.6	2.5	2.8	2.8	2.0	2.0
Credit growth (%; annual)	14.1	16.6	19.3	26.3	27.6	27.7	26.7	19.4	18.9	16.2	10.7	10.7
CAR (in %)	23.6	24.8	24.2	25.9	24.3	24.2	22.5	24.9	23.3	22.5	21.8	21.8
Tier 1 CAR (in %)	21.2	22.4	21.4	23.3	21.6	21.3	19.9	22.3	20.7	20.4	19.9	19.9

(3) Financial Sector Development

Measuring financial development: IMF index

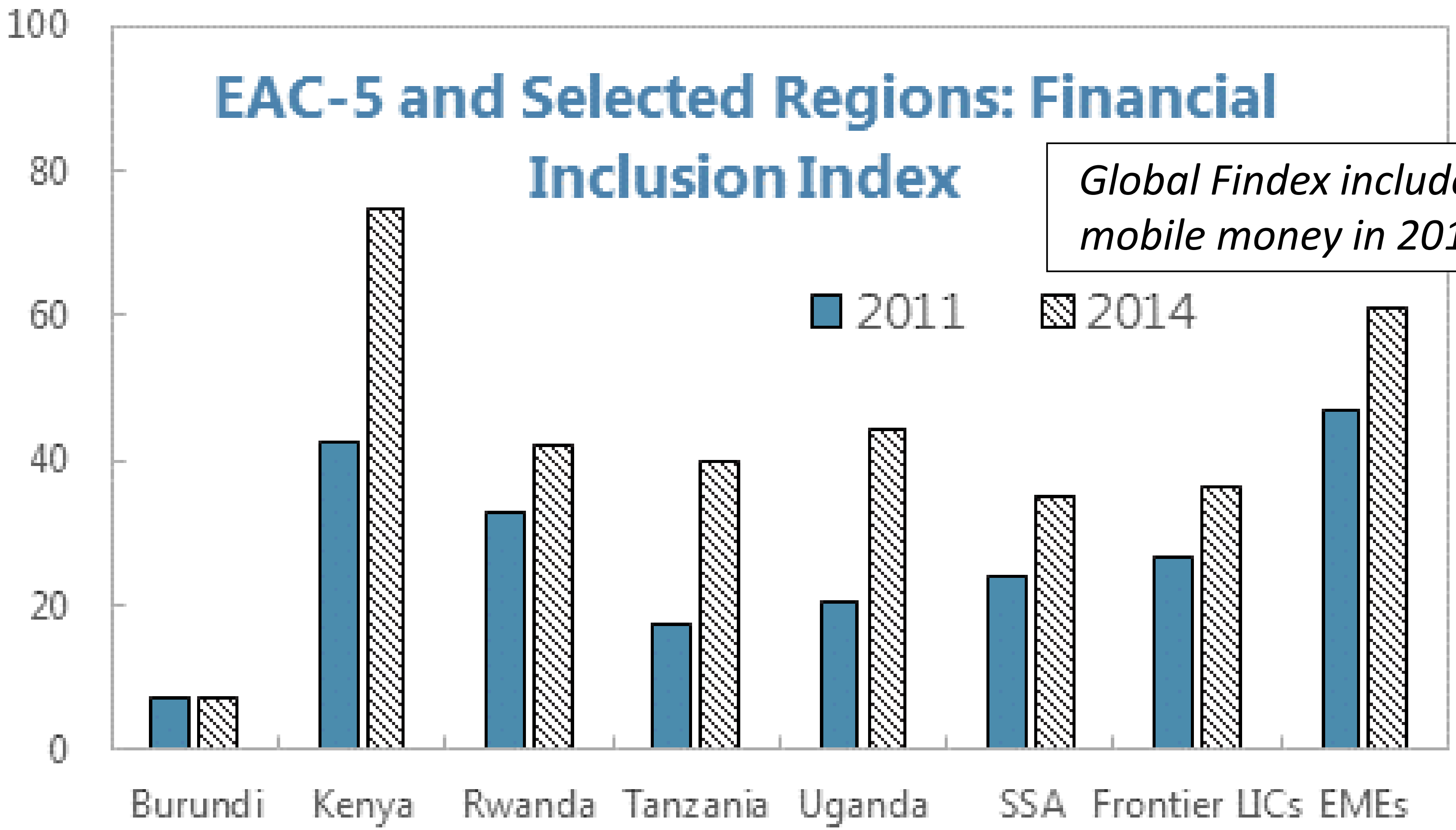
Developed after financial crisis to explore limits to level and pace of financial development for promoting growth and stability, particularly among EMs.

- Positive returns to growth and stability at lower income levels, but marginal returns diminish with more financial deepening, with negative returns at some point.

- Financial "institutions" more important at lower income levels; securities markets more important at higher income levels.

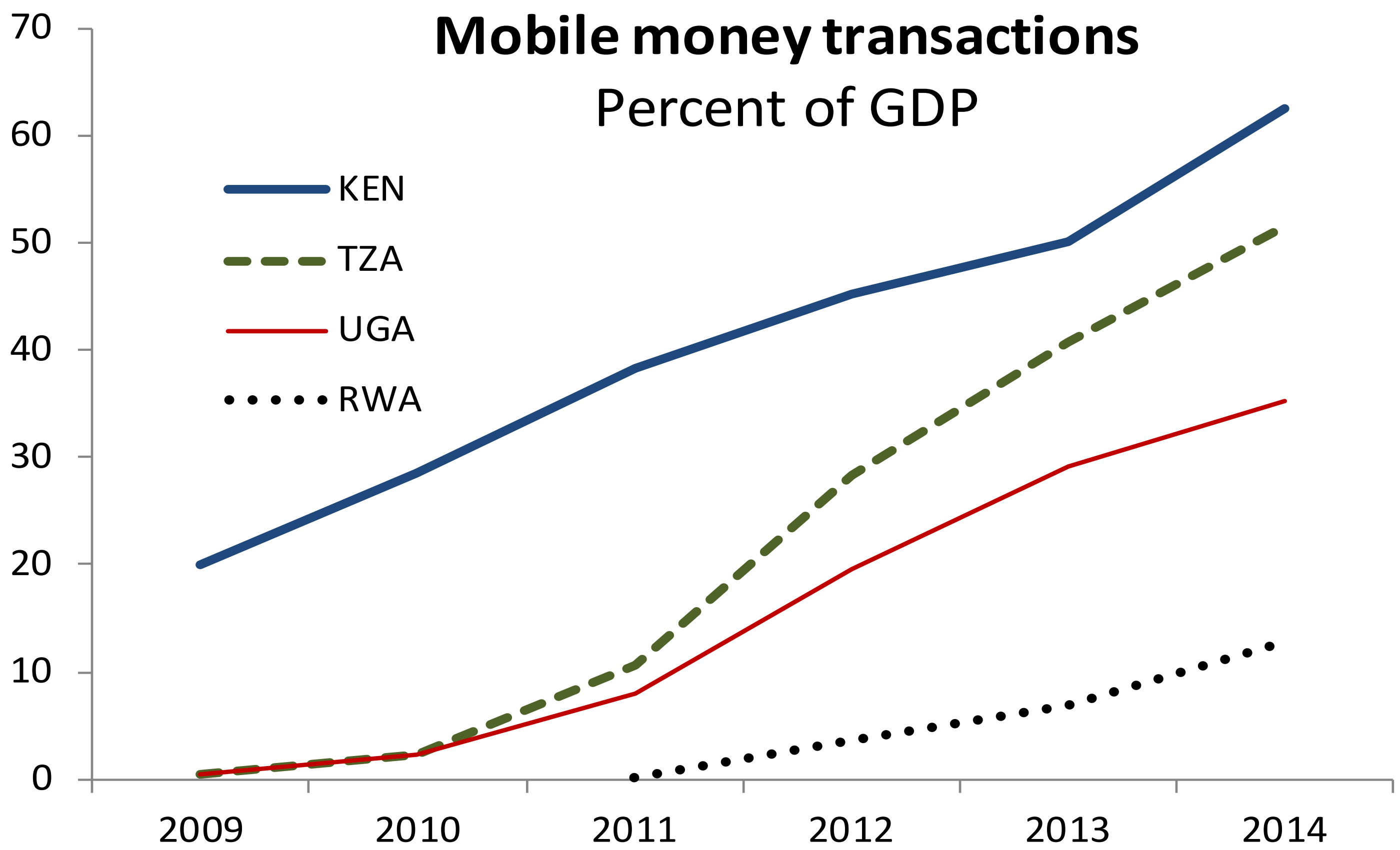
- Too fast a pace of financial deepening leads to instability.

Financial Institutions – EAC Ahead of the Pack for Access



Global Findex includes mobile money in 2014

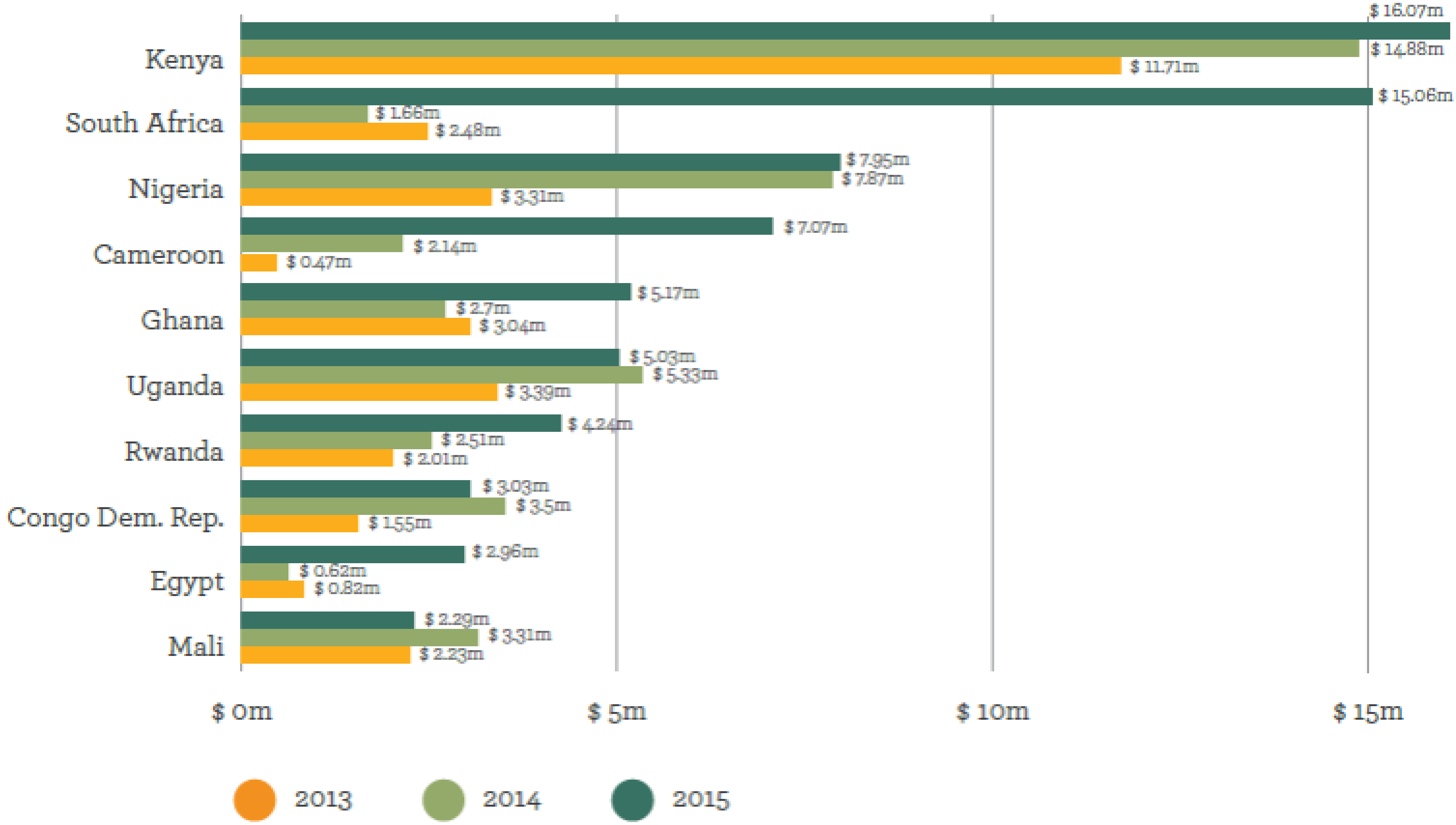
EAC Financial Access – a function of innovation



Source: IMF Financial Access Survey.

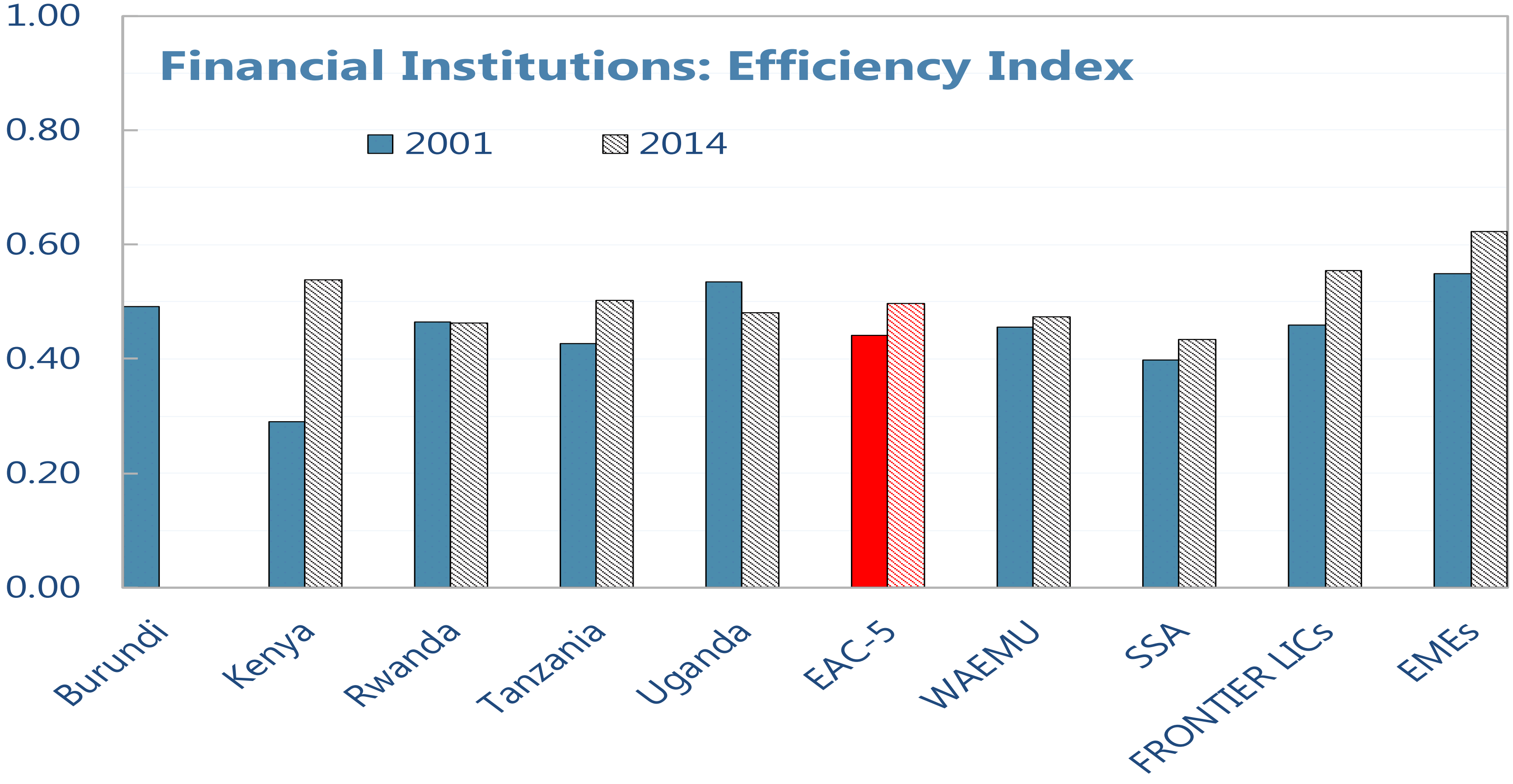
EAC Financial Access – more innovation

Alternative Financing in Africa

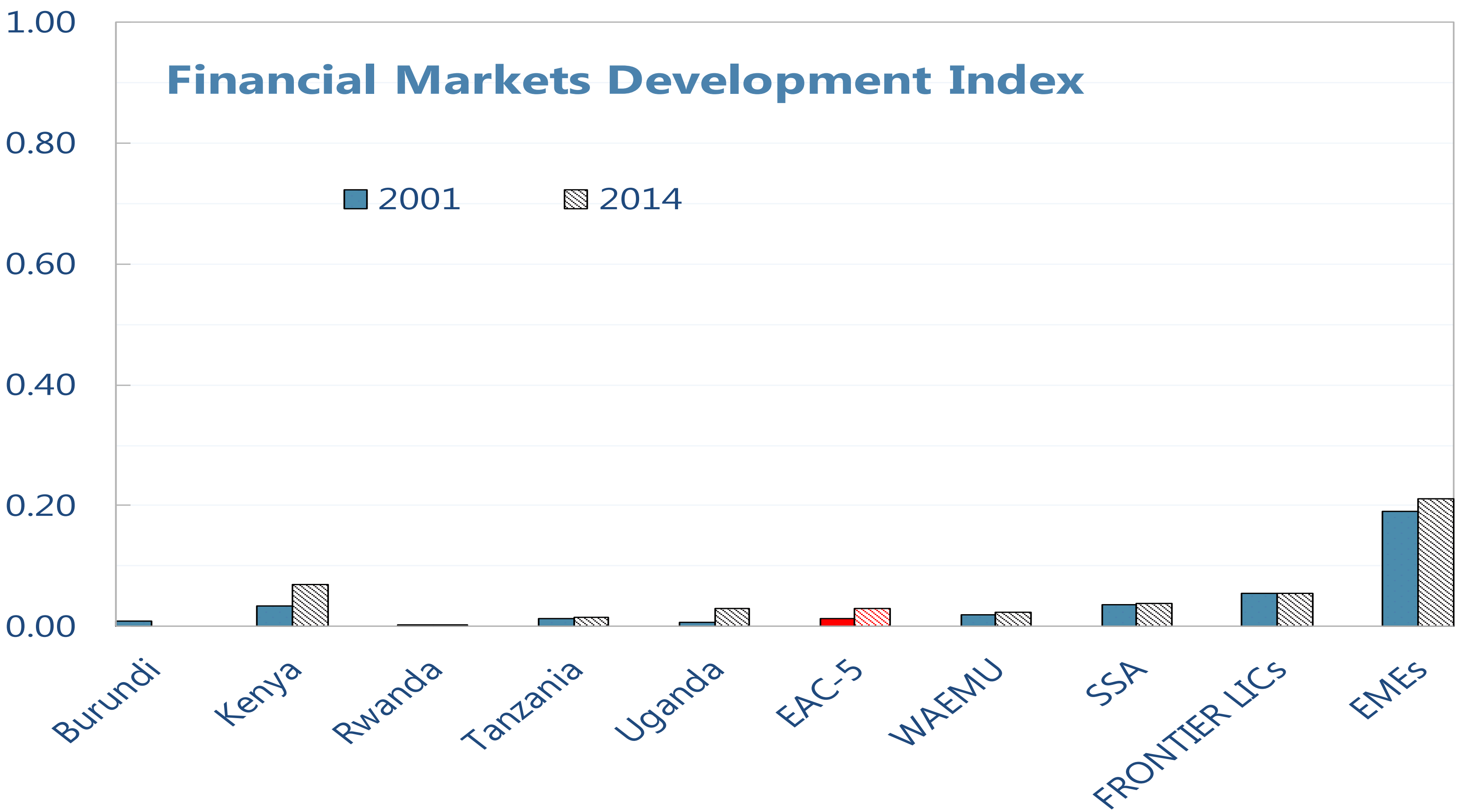


Source: University of Cambridge: Alternative Financing Benchmarking Report, Feb. 2017

Financial Institutions – efficiency in Rwanda just above sub-Saharan Africa



IMF index measuring securities markets



Innovation vs. stability and consumers

- Financial innovation creates synergies for existing institutions and activities and use of big data can help in credit ratings.
- Certain types of financial inclusion indicators, such as credit growing too rapidly, can create greater risks for financial stability and systemic risks. Mobile money and online lending =credit provision.
- Alternative financing creates new concerns about consumer protection.

Conclusion

- Rwanda’s economy has grown fast, and financial deepening has accompanied economic growth.
- Rwanda’s financial system and its supervisory framework is strong and stable. Neither the strong credit growth of the past seven years, nor the recent deceleration of credit growth reveals significant systemic weaknesses or vulnerabilities.
- However, credit and financial intermediation has become more important for the economy (and will continue to do so).
- Notable improvements in financial access in Rwanda, but there remains room for improvement in lowering the costs of financial services and creating deeper financial markets.

Thank you!