Tax Policy and reforms in Rwanda
&
Evaluation of a flat tax
&
Hall & Rabushka

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Presentaion based on joint work with,
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Why a flat tax?

- Simple
  - Definition of tax base
  - Uniform rate across tax bases reduce tax planning
  - Increased compliance
  - Increased knowledge

- Low rates broader base implies revenue neutrality
- Low rates can stimulate labor supply
- Can stimulate investments
- Increased economic growth

- Increased inequality
- Optimal?

International experience

- Transition countries
  - Low tax ratio
  - Low compliance
  - Large variation in designs

Strong economic growth, increased FDI and increased compliance

Difficult to evaluate:

The Russian reform 2001 (Ivanova, Keen, Klemm, 2005)

- No evidence that the reform had any effect on labour supply
- Increased tax-compliance

Polish reformed business taxation 2004 (Kopczuk, 2012)

- Increased business income
- Revenue neutral

Personal income tax - Definition

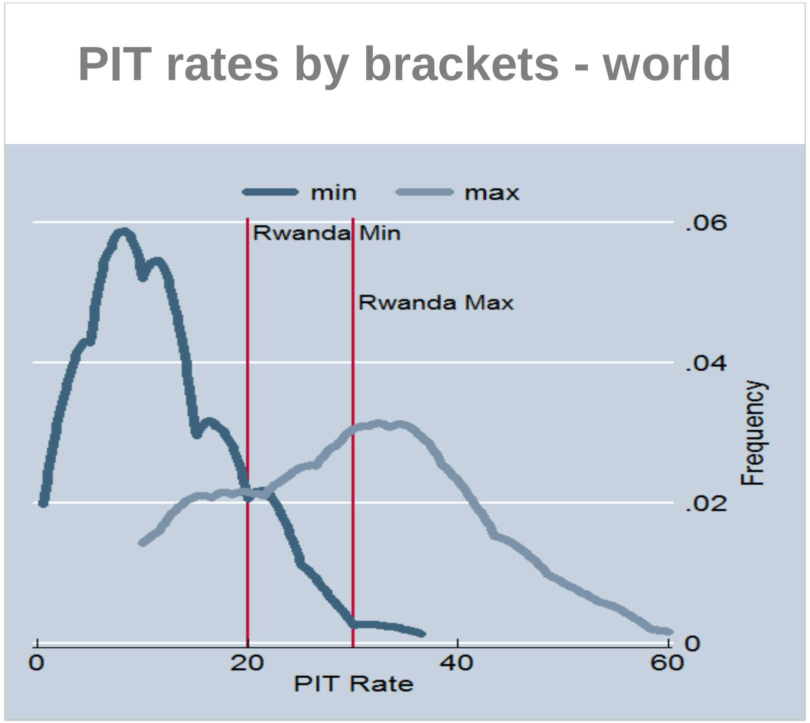
- PAYE – a withholding tax on income, applicable to employees

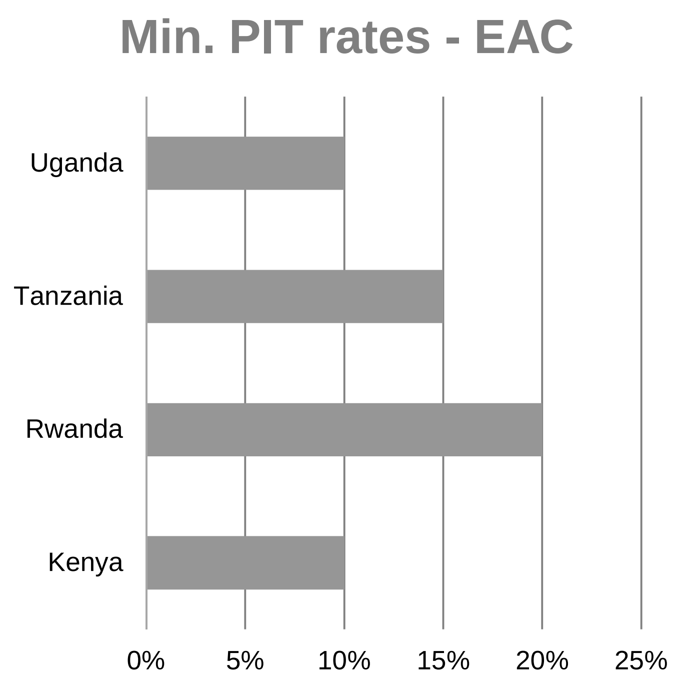
Annual Taxable income	Tax rate
0 – 360,000	0%
360,001 – 1,200,000	20%
Above 1,200,000	30%

- PIT is defined by:
  - Rates
  - Brackets
  - Taxable income

Simulation variables

Personal income tax – Benchmarking

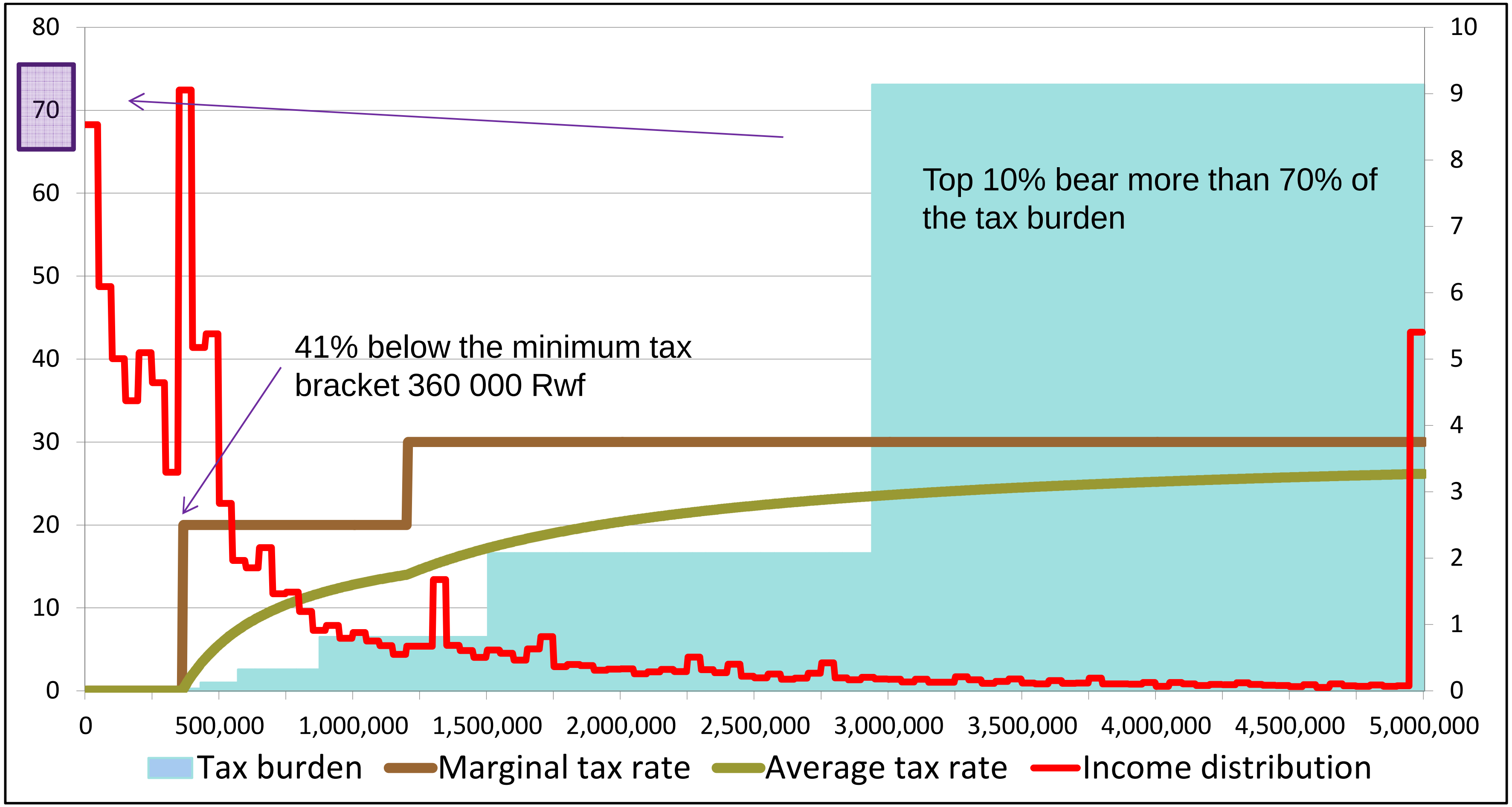




- Min PIT rate in Rwanda on the high end of the world's distribution
- Min PIT rate in Rwanda is the highest in the EAC

IGC International Growth Centre

Personal income tax 2010 – tax base, burden



Source: Social security register, 293,753 individuals with salary information.
Note: Left hand axes tax and tax burden, right hand axes income.

Static flat tax with basic allowance

	Percentage change from status quo			
PIT rate	PIT revenue	Disposable income	PIT + VAT revenue*	Change in Gini
15%	-44%	12%	-38%	3.8%
20%	-26%	7%	-22%	2.7%
27%	0%	0%	0%	0.7%

* Assumes that increased disposable income is consumed at 15 % VAT

- If PIT was set to 15% at the beginning of 2010 it would have caused a loss in PIT revenue between 44% and 38%
- The revenue neutral “flat” PIT rate is 27%
- Flattening PIT at a low rate increase income inequality

Revenue neutral flat tax with basic allowance

	PIT rate	Percentage change from status quo		
		PIT revenue	Disposable income	Gini
Long run growth - 10% increase in salary	**22**	-8%	15%	2%
Participation - 10 % increase in number of individuals paying social security	**22**	-10%	15%	2%
Long run participation and growth - 10% increase in individuals paying social security and 10% increase in salary	**18**	-18%	31%	3%

- In all simulations the PIT revenue loss is offset by the VAT revenue gain
- Heavy dependence on consumption (saving) behaviour assumption
- Related to the important issue of indexation

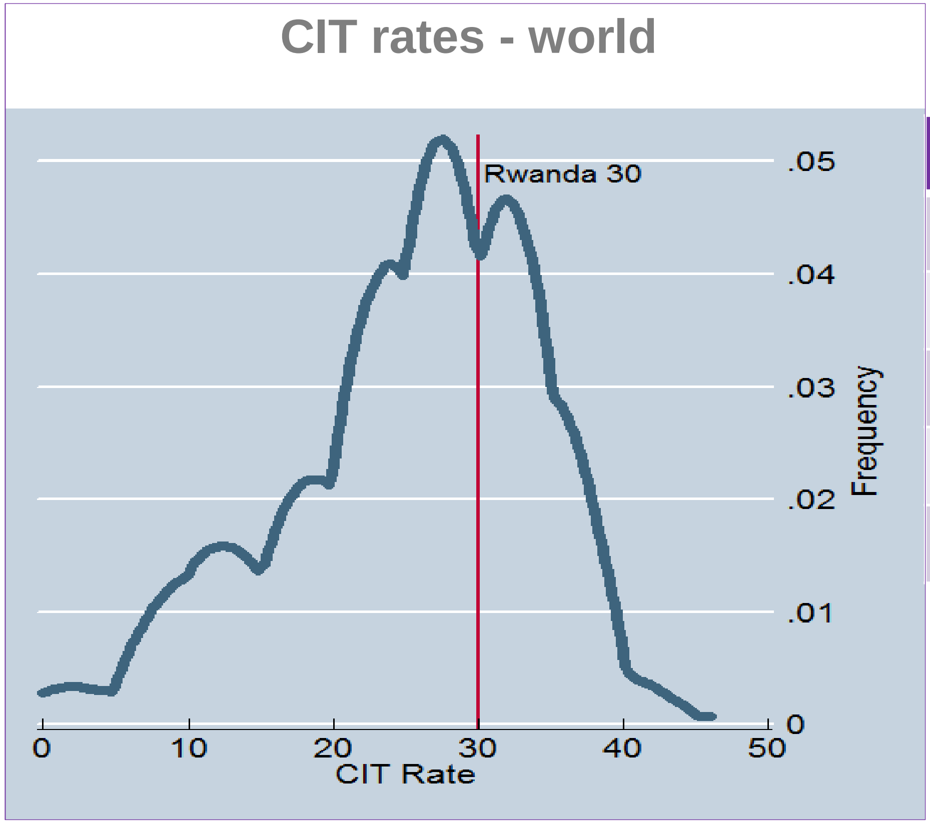
Corporate income tax

- Corporate income tax is applied at a rate of 30%
- CIT is defined by:
  - Rate
  - Taxable income

Simulation variables

- Differs from PIT in: no brackets
- Definition of a tax base: perimeter of taxable income of the taxable population

Corporate income tax - Benchmarking



CIT rates - EAC

Country	CIT
Burundi	35
Kenya	30
Rwanda	30
Tanzania	30
Uganda	30

- Rwanda's CIT is in line with international practice
- Definitions of taxable income are more difficult to compare

Definition of taxable income – Current and H&R

Hall-Rabushka tax base
Gross profits
Deduct
- Wages
- Investment

Tax due

Turnover
- Subtract cost of goods sold

Gross profits
- Subtract op. expenses and Depreciation

Net operating income
- Add investment, rental and extraordinary income

Total income
- Subtract Investment, Rental, T&R and extraordinary expenses, bad debts and investment allowance (accelerated depreciation)
- Reintegrate non deductible expenses
- Subtract loss carry-forward and non taxable dividends
- Depreciation adjustments

Net income

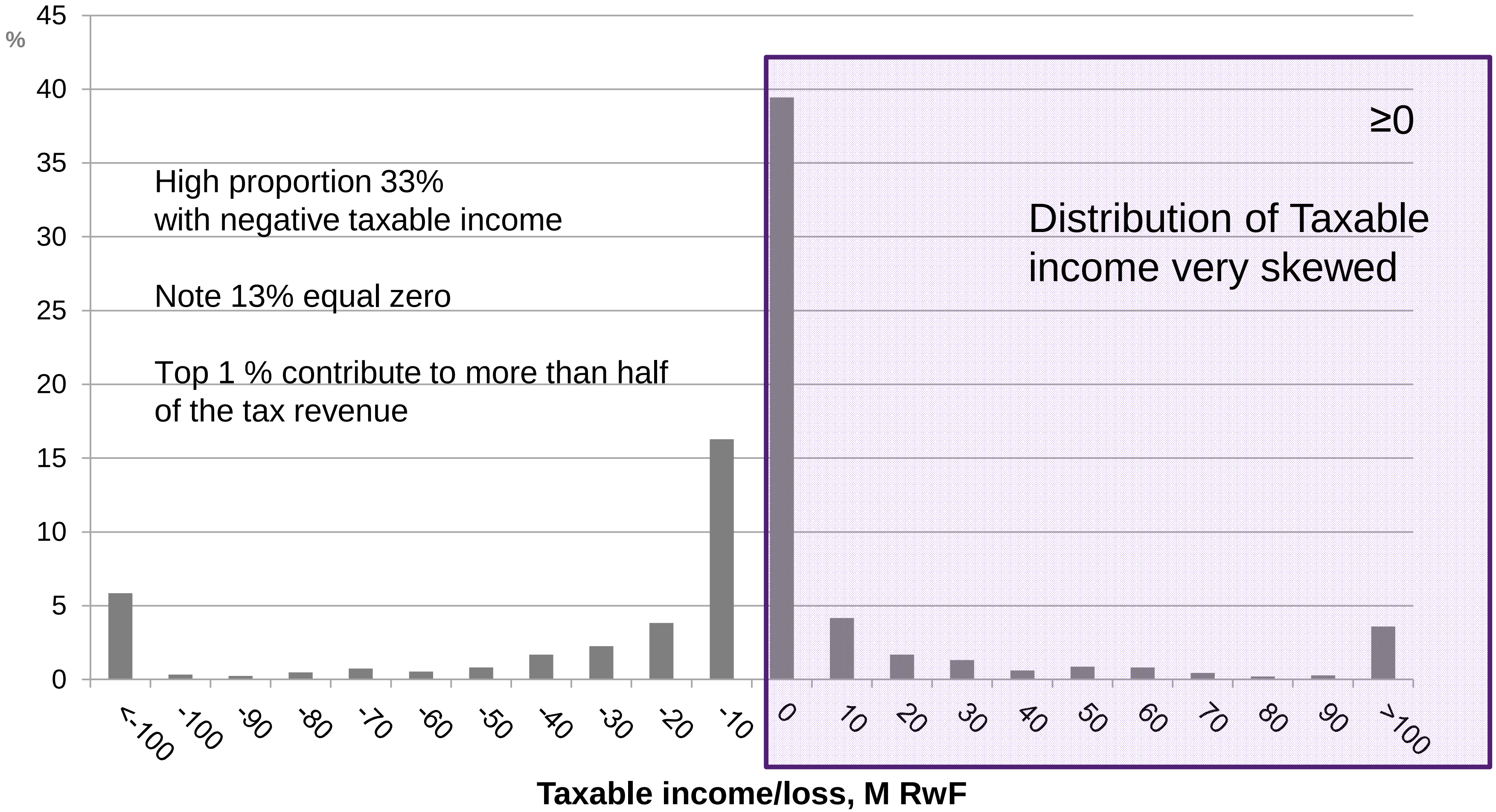
Taxable income
➔ Apply rate and discounts here

Tax due

Characteristics of the H&R tax

- All income in the country is classified as either business income or wages and salaries
- An equal and reasonable low tax on business and personal income
- The tax base for personal income are wages, salaries and pension
- The tax base for business income is gross profit minus investment expenses
- The full investment cost during the year is deducted from the taxable income in that year
- Unlimited Loss-Carry-forwards (with interest)
- A basic income allowance for personal income
- Similar to consumption tax

Corporate income tax 2010 – the tax base



Source: Tax returns

No discounts, broader tax base

Definition of tax base	Tax base (>0)	Tax rate	Tax revenue	Change in tax revenue	Share who pays tax
Taxable income (current)	92 736	**30%**	26 821		51%
Taxable income (no discounts)	92 736	**29%**	26 893	0%	52%
Gross profit	602 622	**4%**	24105	-10%	78%
Turnover	1 462 547	**2%**	29 251	9%	80%

- Dropping discounts on exports, employment, newly listed, VC, agriculture, allows the CIT rate to drop to 29% with the current definition of taxable income
  - Revenue loss from incentives is minimal (RWF1bn)
- Further drops in the rate require changing the definition of taxable income to achieve revenue neutrality

International Growth Centre

Hall-Rabushka tax

	Tax revenue in RwF Mln					
Uniform Tax rate	**PIT**	**VAT**	**CIT**	**Total**	**Budget balance**	**Percentage change**
15	55 308	3 279	19 245	77 832	-22 055	-22
19	70 057	1 067	24 377	95 501	-4 386	-4
20	73 744	513	25 660	99 918	31	0
21	77 431	-40	26 943	104 335	4 448	4
25	92 180	-2 252	32 075	122 004	22 117	22

A uniform PIT-CIT rate under the H&R tax base revenue neutral at 20%

- Taxable income=gross profit-salary-investments
- Salary information from social security
- Evaluation based on aggregate values
- Investment estimated from depreciation
- Evaluation based on aggregate values – impossible to estimate distributional effects

A detailed evaluation of H&R on CIT

Defining the tax **base**	Data source
Turnover – Cost of Goods and services	Tax returns 2010
Salary expenditures	PAYE 2009 - 2011, complemented with RSSB data
Investment	Financial annexes to the tax returns 2010

- H&R base is by definition wider than the standard base because it eliminates all special claims
- In Rwanda however the difference might be small
  - Only 10% deduct expenses that would no longer be allowed
  - Only 1% benefits from tax incentives

Revenue neutral H&R tax

	Number of firms (1)	Rwanda Tax Payable (2)	H&R tax base (3)	Neutral tax rate H&R % (4)
All firms, banks taxed by standard CIT	456	20 015	104 263	19
All firms, banks taxed by adapted H&R	456	20 015	92 199	22
No banks	444	14 114	61 591	23
No banks and taxable income in ± 1,000 MRwF	415	5 132	23 849	22
No banks and taxable income in ± 500 MRwF	395	3 583	15 228	24
No banks and taxable income in ± 100 MRwF	312	1 011	4 698	22

Conclusions

- Lower effective tax rate incompatible with revenue neutrality. Lower rates need to be compensated by:
  - Wider definition of taxable income
  - Shift of tax burden across tax types
- Removing discounts cannot finance meaningfully reduced CIT
- A flat tax on PIT worsen inequality
- A revenue neutral H&R tax between 20-25%?
  - Behavioral effects?
  - FDI?
- Large effects across sectors
- Transition?
- EAC tax harmonisation?