

Towards Sufficiency & Equity in Latin America

Personalized VAT

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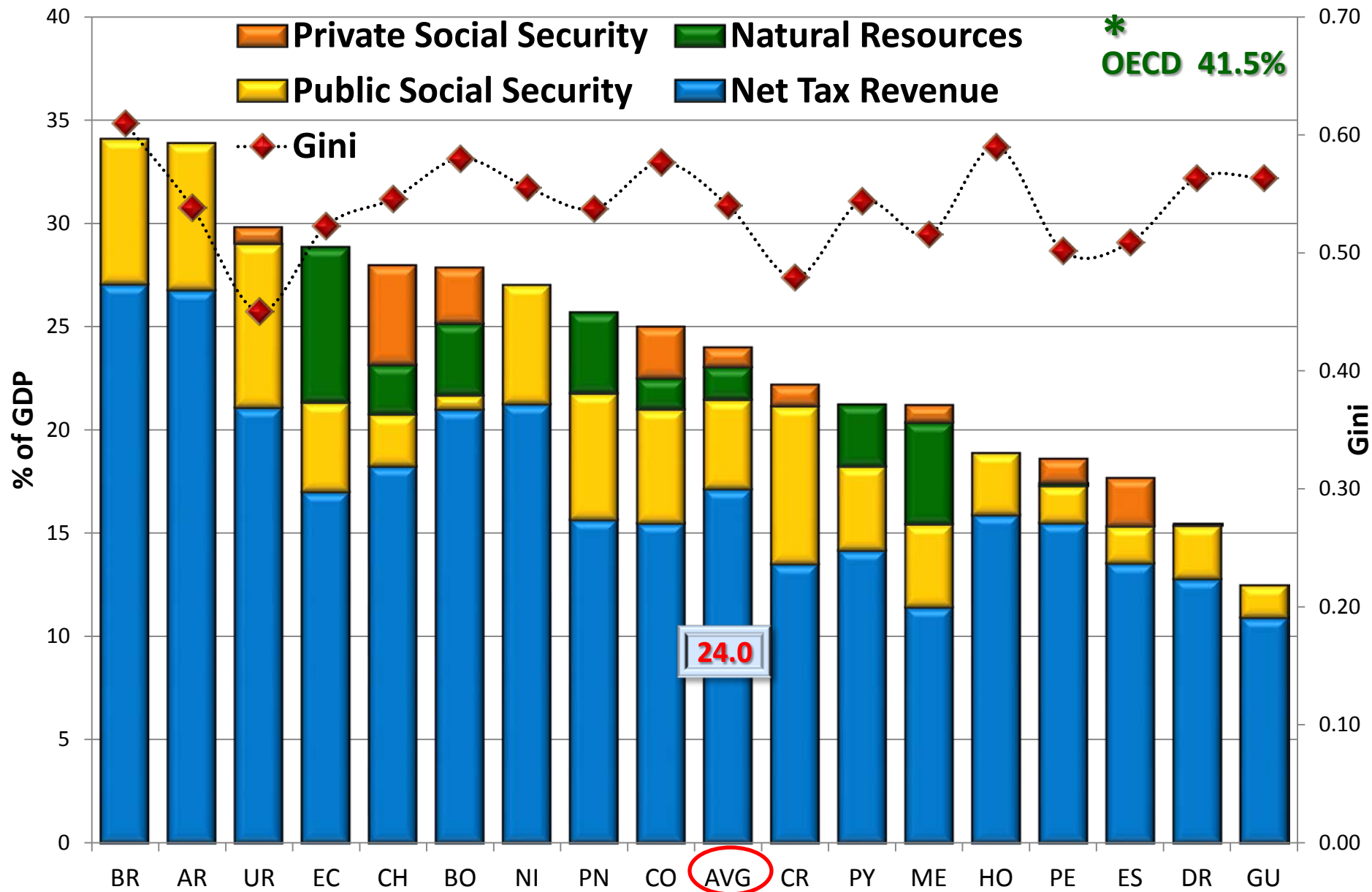
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4th Global Conference on Tax and Inequality

India, New Dehli

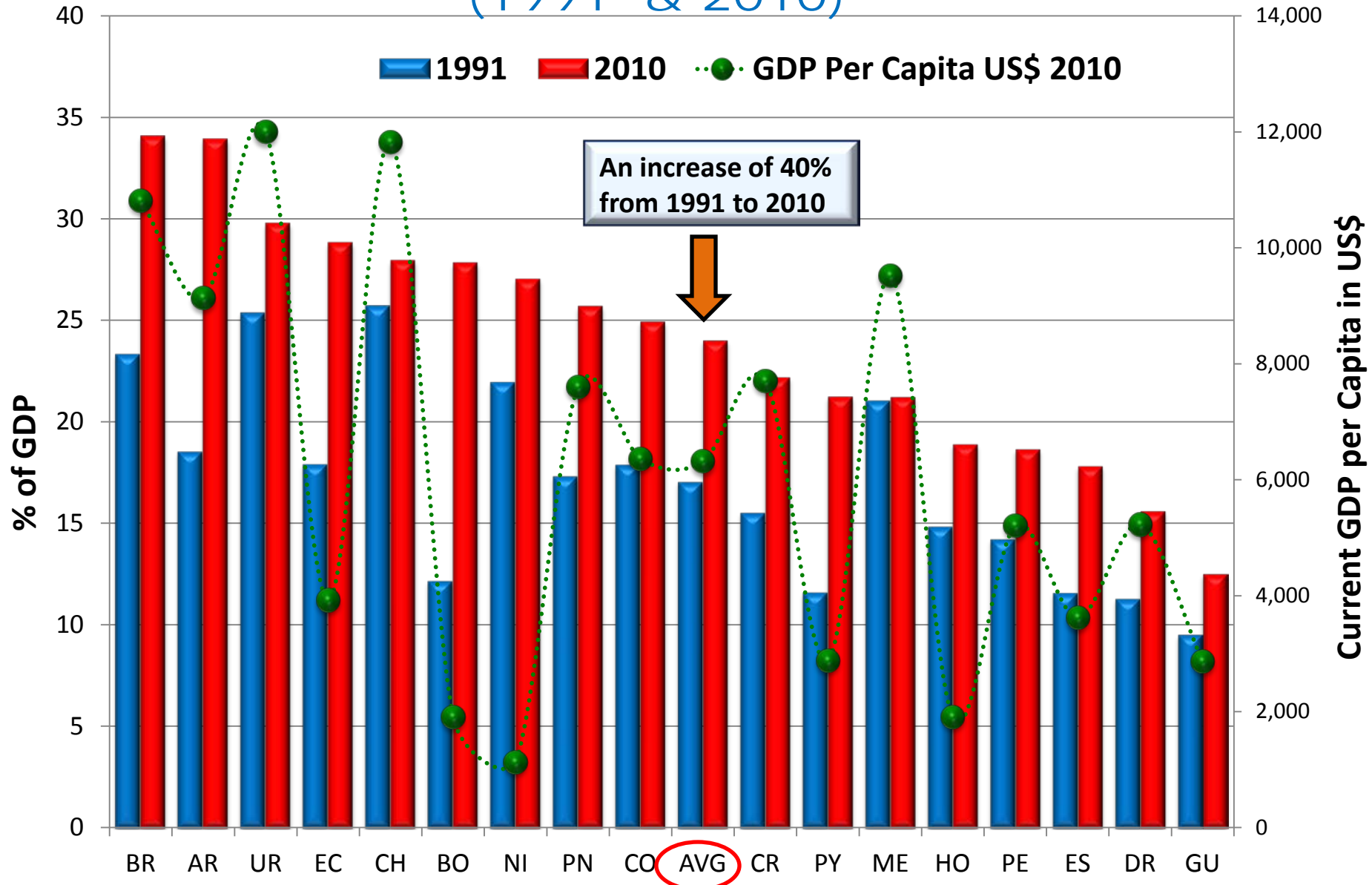
December 2011

Fiscal Revenue (2010) and Gini



Source: ECLAC, IDB, CIAT, MECON, MF Venezuela, SRI Ecuador, DIAN Colombia, SUNAT Peru, MF Panama, Ministerio da Fazenda, Brazil. (*) Includes renewable and non renewable natural resources, and private pension contributions.

FISCAL REVENUE OF LATIN AMERICA (1991 & 2010)



Source: elaborated based on data from ECLAC, IDB, CIAT, IMF, MECON, SRI Ecuador, DIAN Colombia, SUNAT Peru, MF Panama, Ministerio da Fazenda, Brazil

FISCAL PILLARS

Simple Average % of GDP (2008/09)

	OECD (2)	Latin America (4)	Carib- bean	“Rest of the world” (5)
Fiscal (1) Revenue	41.5	23.7	25.3	31.2
VAT	6.7⁽³⁾	6.4	5.5	6.5
Income Tax	12.6	4.9	6.5	6.3
<i>Corporate</i>	<i>3.6</i>	<i>3.4</i>	<i>3.4</i>	<i>3.5</i>
<i>Personal</i>	<i>9.0</i>	<i>1.5</i>	<i>3.1</i>	<i>2.8</i>
Social Security	10.2	4.5	2.1	8.4
Rest	12.0	7.9	11.3	10.0

Weighted Average % of GDP (2008/09)

	OECD (2)	Latin America (4)	Carib- bean	“Rest of the world” (5)
Fiscal (1) Revenue	37.4	27.8	28.1	26.7
VAT	4.3⁽³⁾	8.2	5.7	4.8
Income Tax	12.1	5.4	8.5	7.2
<i>Corporate</i>	<i>2.9</i>	<i>2.5</i>	<i>3.9</i>	<i>4.4</i>
<i>Personal</i>	<i>9.1</i>	<i>2.9</i>	<i>4.6</i>	<i>2.8</i>
Social Security	10.9	5.2	1.8	6.5
Rest	10.1	9.0	12.1	8.2

(1) Includes public and private social security mandatory contributions and net income resulting from the exploitation of natural resources by public entities. (2) Excludes Chile, Mexico, and Turkey and USA data was adjusted to include mandatory social security contributions. (3) Includes the *sales tax* of the United States. (4) Includes Chile and Mexico. (5) Encompasses 40 countries: 14 from Europe, 10 from Africa, and 16 from Asia.

Fiscal Revenue CONCLUSIONS

- 1) Fiscal revenues are larger than traditional due to Private Pension Contributions (compulsory) and Natural Resource revenues (public share)
- 2) Fiscal revenues are quite diverse along countries on their level, the fiscal *mix* and, growth pattern
- 3) Fiscal revenues are not linked to income level or equity distributions but bounds the Public Expenditures *dream* (3 levels of focalization)
- 4) Fiscal revenues need serious improvements on many areas: a) level (IT system/PIT, also Property); b) quality (mainly IT but also *heterodox* taxes); and c) flexibility (stability but also *out of the box*)

Fiscal Policy and Equity in Central America and DR

Tax System: Value Added Tax

VAT: Deciles According to Income of Individuals							
1. Progressivity	CR (2004)	DR (2004)	ES (2006)	GU (2000)	HO(*) (2005)	NI (2001)	PN (2003)
Effective tax/income ratio (as a %)							
1 st —	5.4	8.8	24.0	20.2	10.2	8.6	4.4
2 nd —	4.2	5.5	15.2	9.1		5.1	1.7
2 nd +	3.5	3.0	7.0	5.4		3.4	1.2
1 st +	3.0	2.0	6.5	4.9	5.0	3.4	1.4
Kakwani (if < 0 => regressive; if > 0 => progressive)	-0.085	-0.185	-0.141	-0.136	-0.089	-0.093	-0.089
2. Redistribution							
Reynolds - Smolensky	-0.003	-0.005	-0.013	-0.008	-0.005	-0.003	-0.001
Losers	1 to 9	1 to 9	1 to 7	1 to 8	Quintiles 1 to 4	1 to 9	1 to 5 & 10
3. Who pays the tax?							
40% -	9.4%	18.9%	24%	16.5%	13%	12.6%	9.9%
20% +	62.2%	46.1%	37%	50.3%	54%	55.8%	60%
20%/40%-	6.6	2.4	1.5	3.0	4.2	4.4	6.1
Memo: VAT revenue (as % of GDP)	4.9	3.9	7.0	4.8	6.2	6.4	1.6
(*) Quintiles							
Source: based on Trejos (2007); Díaz (2008); ICEFI (2007a y 2009); Garriga et al (2007); Roca (2007); & Rodríguez (2007)							

Fiscal Policy and Equity in Andean Countries

Tax System: Value Added Tax

VAT: Deciles According to Income of Individuals					
1. Progressivity	Bolivia (*) (2000)	Colombia (2003)	Ecuador (2003)	Peru (2000)	Venezuela (2003)
Effective tax/income ratio (as a %)					
1 st —	7.0	10.8	4.6	29.7	6.4
2 nd —		8.6	4.2	13.3	7.2
2 nd +		5.4	4.9	5.8	8.8
1 st +	8.0	4.7	5.2	4.3	9.5
Kakwani (if < 0 => regressive; if > 0 => progressive)	-0.009	-0.068	0.038	-0.177	0.050
2. Redistribution					
Reynolds - Smolensky	-0.001	-0.004	0.002	-0.012	-0.004
Losers	2 & 3	1 to 6 & 9	9 & 10	1 to 8	10
3. Who pays the Tax?					
40%-	7.0%	13.9%	14.1%	18.8%	9.8%
20%+	62%	55.4%	51.8%	43.8%	60.5%
20%+/40%-	8.9	4.0	3.7	2.3	6.2
Memo: VAT revenue (as % of GDP)	5.6	6.3	6.4	4.9	4.7
(*) Quintiles					
Source: elaboration based on Cossio (2005); Zapata and Ariza (2005); Arteta (2005); Haughton (2005); Garcia and Salvato (2005).					

Fiscal Policy and Equity in MERCOSUR and Chile

Tax System: Value Added Tax

VAT: Deciles According to Income of Individuals					
1. Progressivity	Argentina (2008)	Brazil (2003)	Chile (2003)	Paraguay (2001)	Uruguay (2006)
Effective tax/income ratio (as a %)					
1 st —	18.6	23.9	35.3	24.6	21.6
2 nd —	14.1	20.1	19.7	6.4	12.7
2 nd +	9.6	11.9	12.9	4.9	7.6
1 st +	8.4	8.5	8.8	4.6	6.5
Gini Income before VAT	0.484	0.651	0.579	0.558	0.500
Kakwani (if < 0 => regressive; if > 0 => progressive)	-0.076	-0.145	-0.130	-0.108	-0.108
2. Redistribution					
Gini of income after VAT	0.493	0.628	0.597	0.563	0.510
Reynolds - Smolensky	-0.009	0.023	-0.018	-0.005	-0.010
Losers	1 al 8	-	1 to 9	1 to 7	1 to 7
3. Who pays the tax					
40% -	16%				16%
20% +	46%				46%
20% + / 40% -	2.9				2.8
Memo: VAT revenue (as % of GDP)	8.0	12.1	7.7	6.1	10.0
(*) Quintiles					
Source: elaboration based on Fiscal Equity Series in Latin America of the IDB (Preliminar version 2010) and Gomez Sabaini & Harriague 2011					

PERSONALIZED VAT

Improving Equity

Personalized VAT

1. Attempts to counterbalance the VAT regressive nature.

a) **Canada**: mixed approach; targets goods and services; benefits all consumers; transfer to taxpayers but DOES NOT Personalize. b) **Japan**: Direct approach to personalize; identifies beneficiaries; exempts articles on a predefined list. It is administratively costly and intrusive in the definition of the list of priorities.

2. Universal System (Indirect)

- i. Identifies items with incidence in the consumption basket of lower income groups (i. e. food and medicines)
- ii. Instrumented through exemptions and multiple rates (i.e. reduced rates or 0 rate) to that group of goods and services considered of social merit
- iii. In practice, this measure is more beneficial for those who spend more
- iv. In LA we try to solve the fiscal inequity associated with VAT and we end up destroying the revenue capacity of the tax

3. Requirements

- a. Costly in administration and revenue
- b. It does not benefit who it is supposed to as it does not intend to personalize

Improving Equity by Personalized VAT

Uruguay - Consumption Taxes and Exempted from VAT before Tax Reform (2004) *Structured by rate*

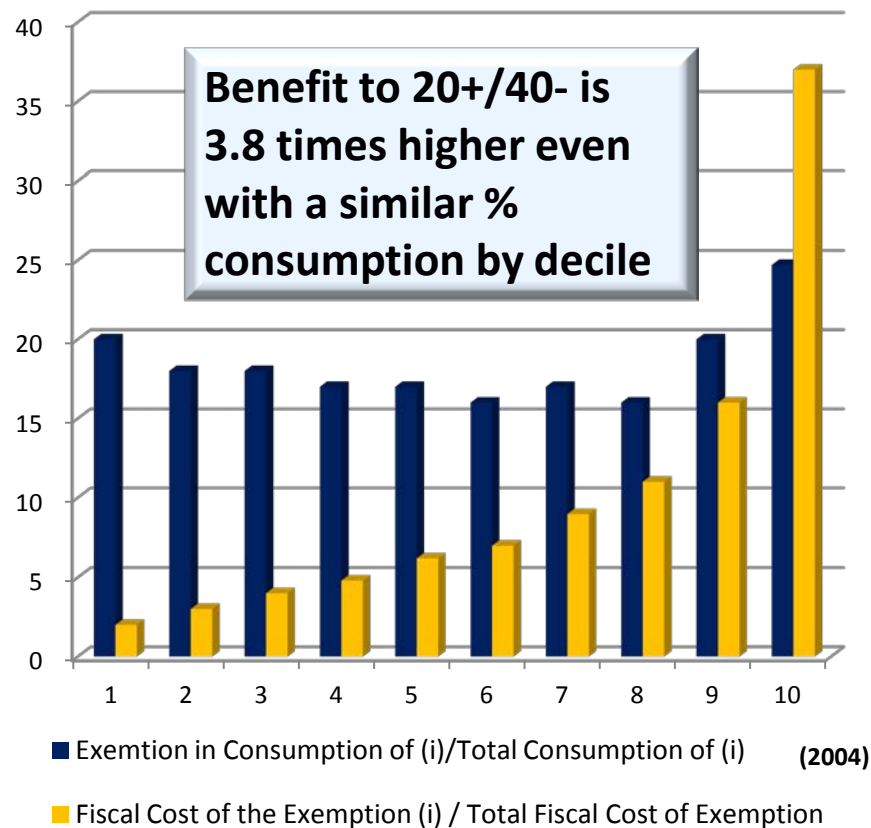
Deciles	Income Distribution	Basic Rate	Minumum Rate	Exemption
1	2.3	2.2	2.7	2.3
2	3.3	3.2	3.8	3
3	4.4	4.3	5	4
4	5.4	5.4	5.8	4.7
5	6.6	6.7	7.3	6.1
6	7.9	8.1	9	6.9
7	9.6	10.4	11.1	9.5
8	11.8	12.2	13.5	10.9
9	15.8	16.9	16.7	16.4
10	32.8	30.7	25.3	36.2
Total	100	100	100	100
40- poorest consumes				
		15	17.2	13.9
20+ richest consumes				
		47.6	41.9	52.6
Inclusion Error (60+)			82.9	86.0

Source: Barreix, Bes and Roca (2009) & ECLAC, CEPALSTAT 2011

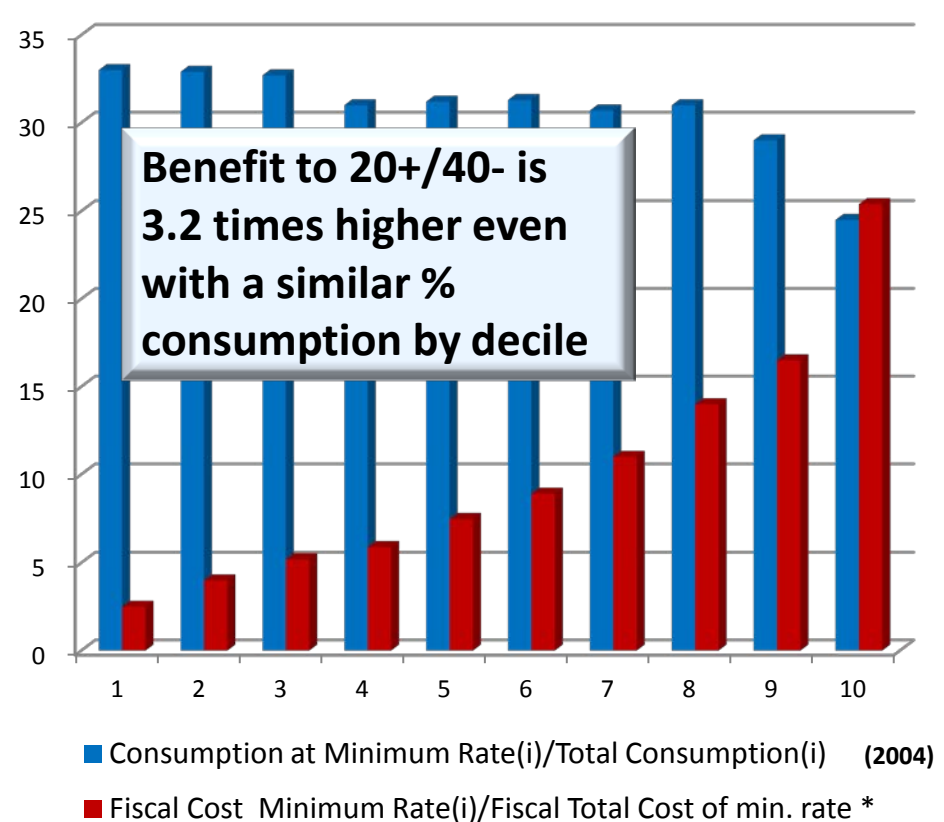
The Inclusion error of Uruguay's VAT

Who benefits the most (by decil)?

**Benefits from Exemption
(per deciles)**



**Benefits of the Minimum Rate
(per deciles)**



URUGUAY

1. VAT Revenue Increase and Transfer	Present	Reform	Variation
VAT Revenue Increase - % Current Collection		15.3	
Transfer/Revenue Increase VAT - in %		74.6	
Transfer/Revenue Current VAT - in %		11.4	
2. Who pays the net VAT (new VAT - Transfers)?	Present	Reform	Variation %
Deciles 1 to 4 (40-)	15.4	7.4	-52%
Deciles 5 to 6	15.1	17.0	13%
Deciles 7 to 8	23.0	25.4	10%
Deciles 9 and 10 (20+)	46.4	50.2	8%
Total	100.0	100.0	
3. Income Distribution	Present	Reform	Variation %
Gini	0.4778	0.4685	-2%
Share in Total Income			
Deciles 1 to 4 (40-)	12.3	12.9	5%
Deciles 5 to 6	13.6	13.4	-1%
Deciles 7 to 8	21.7	21.5	-1%
Deciles 9 and 10 (20+)	52.5	52.2	-1%
4. Indigence	Present	Reform	Variation %
% of indigents	1.6	0.4	-75%
5. Poverty	Present	Reform	Variation%
% of poor individuals	20.9	18.1	-13%

URUGUAY

PERSONAL VAT

1) Generalization of the VAT and unification of tax rate to 19% (current rate 22%, 10% and exemptions)

2) Transfer of 100% of the return of the VAT reform to individual under the poverty line (fixed sum)

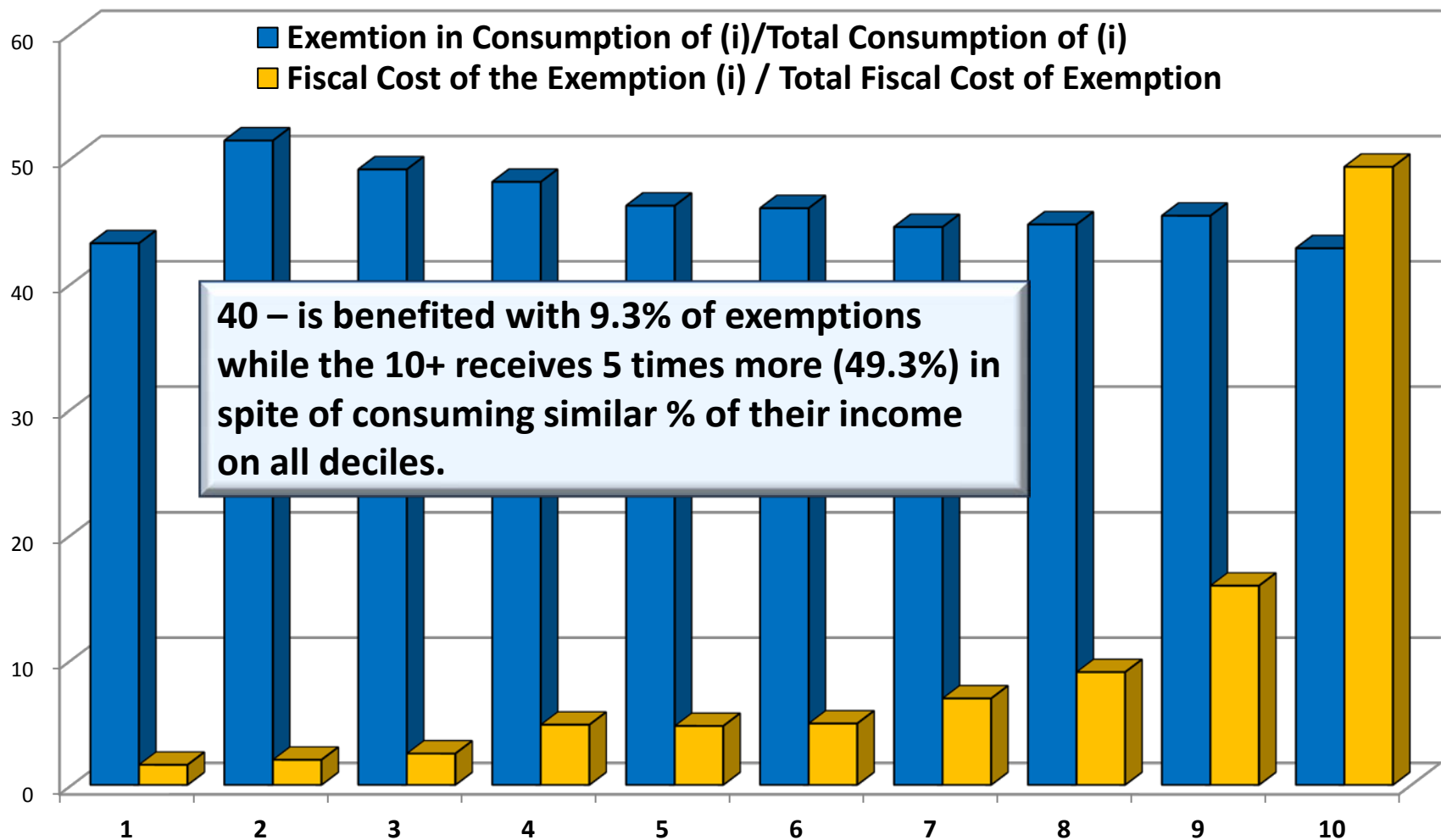
Notes:

1) Year of simulation: 2004

2) Increase in VAT Revenues discounting for evasion (25%) and for VAT from purchases currently exempted (15%)

Source: based on Barreix, Bès & Roca (2011)

"Inclusion Error" of the IGV Costa Rica



Four poorest deciles (40-) benefit with 9.3% of the exemption while the richest decile (10+) receive 5 times (49.3%) that of the lowest four deciles. (2004)

=> If all exemptions were to be eliminated, **almost 50% of the additional revenue** would come from the top 10+ decile and less than 10% from the bottom 40- deciles.

Costa Rica

1. VAT Revenue

Increase and Transfer	Present	Reform	Variation
VAT Revenue Increase - % Current Collection		0.0	
Transfer/Revenue Increase VAT - in %		100.0	
Transfer/Revenue Current VAT - in %		33.9	

2. Who pays the net VAT (new VAT - Transfers)?

	Present	Reform	Variation %
Deciles 1 to 4 (40-)	12.1	-12.8	-206%
Deciles 5 to 6	13.9	19.8	42%
Deciles 7 to 8	19.4	26.8	38%
Deciles 9 and 10 (20+)	54.6	66.2	21%
Total	100.0	100.0	

3. Income Distribution	Present	Reform	Variation %
Gini	0.580	0.536	-8%
Deciles 1 to 4 (40-)	9.2	10.1	
Deciles 5 to 6	10.8	10.6	10%
Deciles 7 to 8	17.5	17.2	-2%
Deciles 9 and 10 (20+)	62.5	62.1	-2%

4. Indigence	Present	Reform	Variation%
% of indigents	5.6	3.9	-30%

5. Poverty	Present	Reform	Variation%
% of poor individuals	23.2	17.7	-24%

Costa Rica

PERSONALIZED VAT

1) Broad tax base, except for real estate rentals, health and education services, passenger transport and financial services.

The rate remains at 13 percent.

2) Transfer of 100% of the increase of the VAT to the lowest income 3 deciles (30-).

Notes:

- 1) Year of simulation: 2004
- 2) Credit on purchased VAT of items currently exempted.

Source: based on Barreix, Bès & Roca (2011)

Improving Equity in Fiscal Policy in LA

Personalizing VAT: Inclusion error ... disqualifies for redistribution

VAT Redistribution vs. PSE Redistribution		
	Honduras	Nicaragua
VAT tax expenditure (% of GDP)	2.3	3.1
Gini variation x 100	0.80	0.44
Gini Variation per 1% of GDP of Tax Expenditure	0.35	0.14
Public Social Expenditures (PSE as % of GDP)	0.50	1.7
Gini Variation x 100	0.40	1.5
Gini variation per 1% of GDP of PSE	0.89	0.88
PSE effect / VAT effect	2.5	6.2

PSE Honduras = Family allowances, PRAF (2005)

PSE Nicaragua = Primary Education (2001)

Source Barreix, Bes and Roca (2009)

Personalized VAT: Conclusions

1. Proposal provides relief to low income groups

- a) Country simulations are promising in terms of poverty outcomes
- b) Avoids costly generalizations to those that do not need it

2. Implementation would employ proven administrative processes and technology

- a. Conditional Cash Transfers (CCT) transparent beneficiary targeting
- b. Transfer amount determined by incidence of VAT on decile's consumption basket (household survey data)
- c. Electronic payments via financial systems (debit cards)

3. Preserves VAT's revenue potential

- a) Tax base generalization generates resources that will be re-distributed.
- b) Tax base generalization improves tax administration, cuts compliance costs, and reduces informal sector.

4. *Limitations:* *i)* Fiscal cost (if high poverty level), *ii)* Administrative capacity, and *iii)* Need to be complemented with public policies (health, education, etc.) that build human capital in the long run

Personalized VAT: Conclusions 2

1. **“Personalized” means based on the average consumption a determined decil based on data from income and consumption household surveys. In all cases, there is no rate differential.**
2. **There are 3 types of compensation for the extra revenue from the generalization of the VAT:**
 - a. Progressive: una transferencia por una fracción o toda la recaudación lograda a través del IVA es transferida a deciles seleccionados (*Bès 1998*). a transfer for a fraction or the whole amount of the extra burden obtained by the generalization of the VAT is awarded to the selected (below or close to the poverty line) deciles,. (*Bès 1998*)
 - b. Pro (pension) Savings: a (differential) transfer to the personal pension account of selected deciles (Levy, 2010)
 - c. Regressive: a small % of the VAT is credited to consumers who operate with “smart cards” or similar. Impacts: i) it generates a significant fiscal cost and, ii) tend to be regressive (the poor usually do not hold credit cards). However, in some cases it may have limited success to incentive invoicing (diminishing evasion) and in this cases will promote horizontal equity.

IDB Series on FISCAL EQUITY

Fiscal Equity in Central America, Panama, and Dominican Republic. Barreix, Bès y Roca (2009)

<http://biblioteca.programaeurosocial.eu/PDF/Fiscalidad/Fiscal9.pdf>

Fiscal Equity in the Andean Countries: Estimation of the Progressivity and Redistributive Capacity of Taxes and Social Public Expenditures. Barreix, Roca & Villela (2006)

http://www.iadb.org/intal/detalle_publicacion.asp?idioma=ENG&pid=372&tid=7

Fiscal Equity in Brazil, Chile, Paraguay and Uruguay.

<http://www.eurosocialfiscal.org/uploads/documentos/centrodoc/6449893fc621b9dbdf16df6e7a3ca293.pdf>

Personalized VAT. Barreix, Bès y Roca (2010)

http://www.eurosocialfiscal.org/index.php/noticias/ver/pagina/2/id_noticia/478

Solving the Impossible Trinity of Consumption Taxes: The Personalized VAT.

Barreix, Bès y Roca (2012)

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