



The opportunity cost of financing *Progres-a-Oportunidades*

Research Project

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by

José Luis Viveros Añorve



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1. Abstract

The *Progres-Oportunidades* conditional cash transfer program, one of the three main pillars of the social development policy in Mexico, has shown to be an **insufficient tool** for poverty alleviation in the presence of low and unstable economic growth. This research project reviews the state of the art of pro-poor macroeconomics – **focused on tax policy** – and it attempts to assess the opportunity cost of financing *Progres-Oportunidades* in the context of the regional setting of Chiapas. Pro-growth and pro-poor tax structures shall be also explored to finance social policy and to analyze alternative strategies to reduce poverty and enhance (rural) development and (rural) growth. Standard economic analysis tools and modeling will be used, specifically in a regional setting (Chiapas) to elaborate public policy recommendations for inclusive growth and poverty reduction in Mexico.



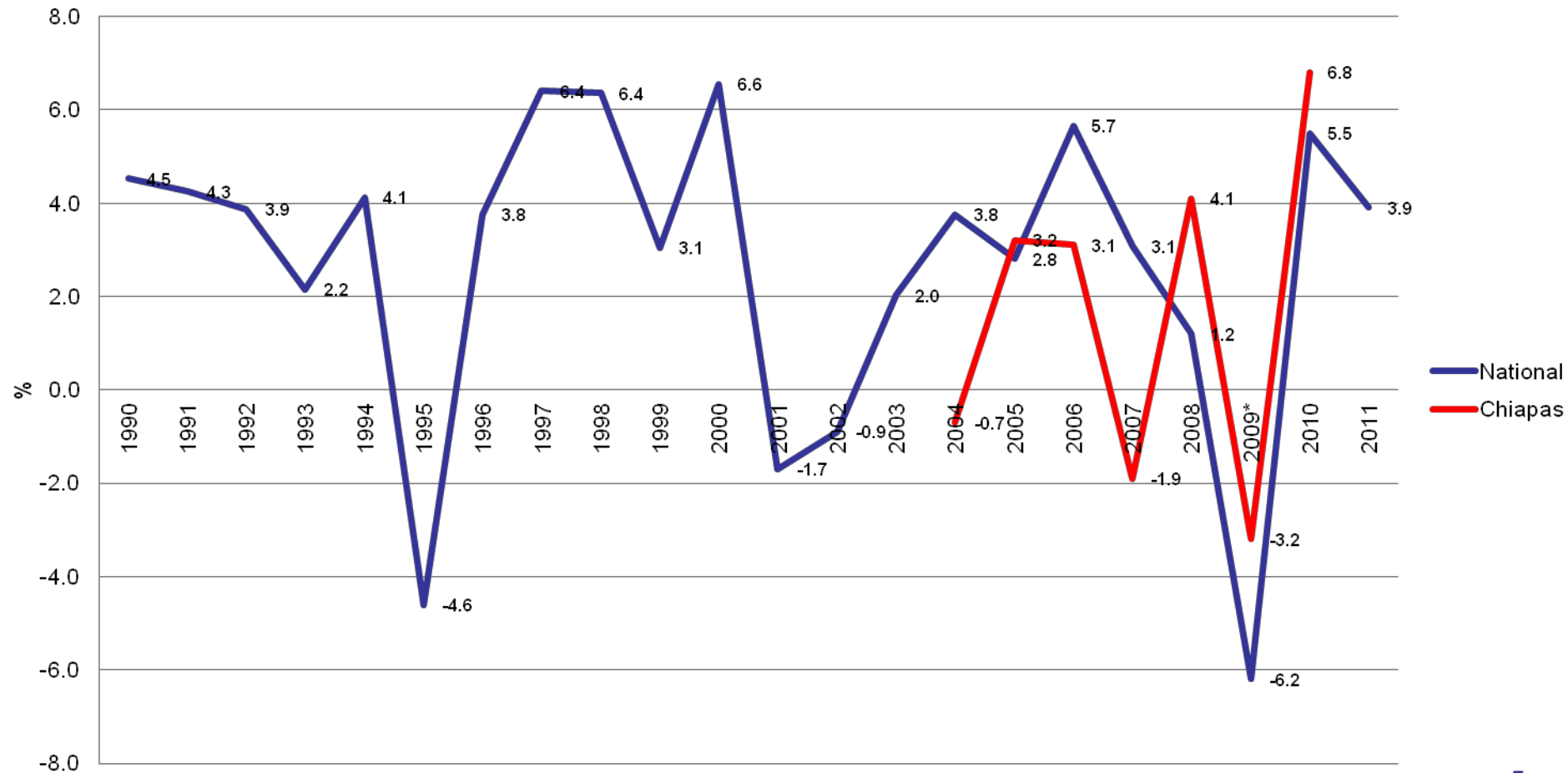
2. Problem statement

Despite macroeconomic stability, Mexico still faces the following challenges:

- I.** Low & unstable economic growth
- II.** Persisting poverty
- III.** Income inequality
- IV.** Low tax revenue
- V.** Distorted labor markets

I. Low & unstable economic growth

GDP growth rate, 1990-2011
(%)





II. Persisting poverty

a. Before Progres-Oportunidades

b. Current status

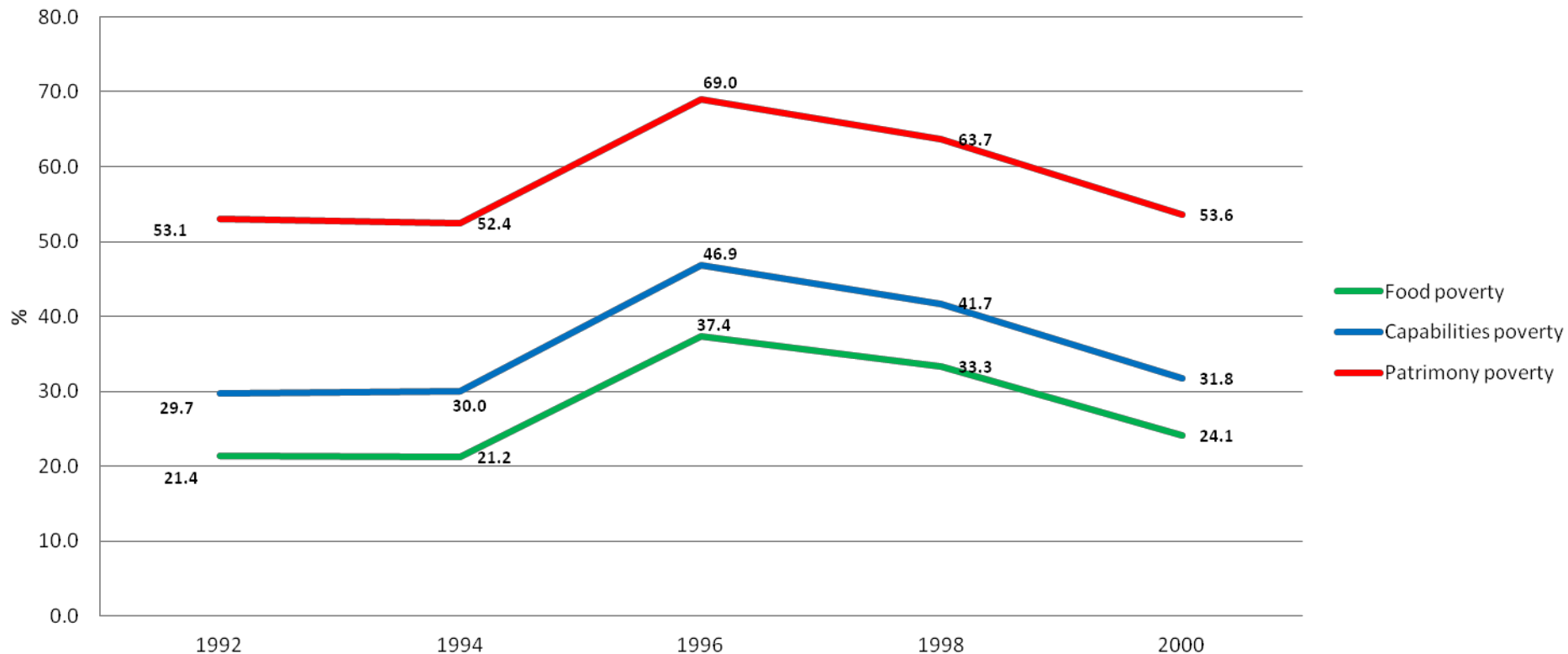
i. National

ii. Chiapas

c. Progres-Oportunidades

a. Before Progres-Oportunidades

Evolution of income poverty in Mexico, 1992-2000

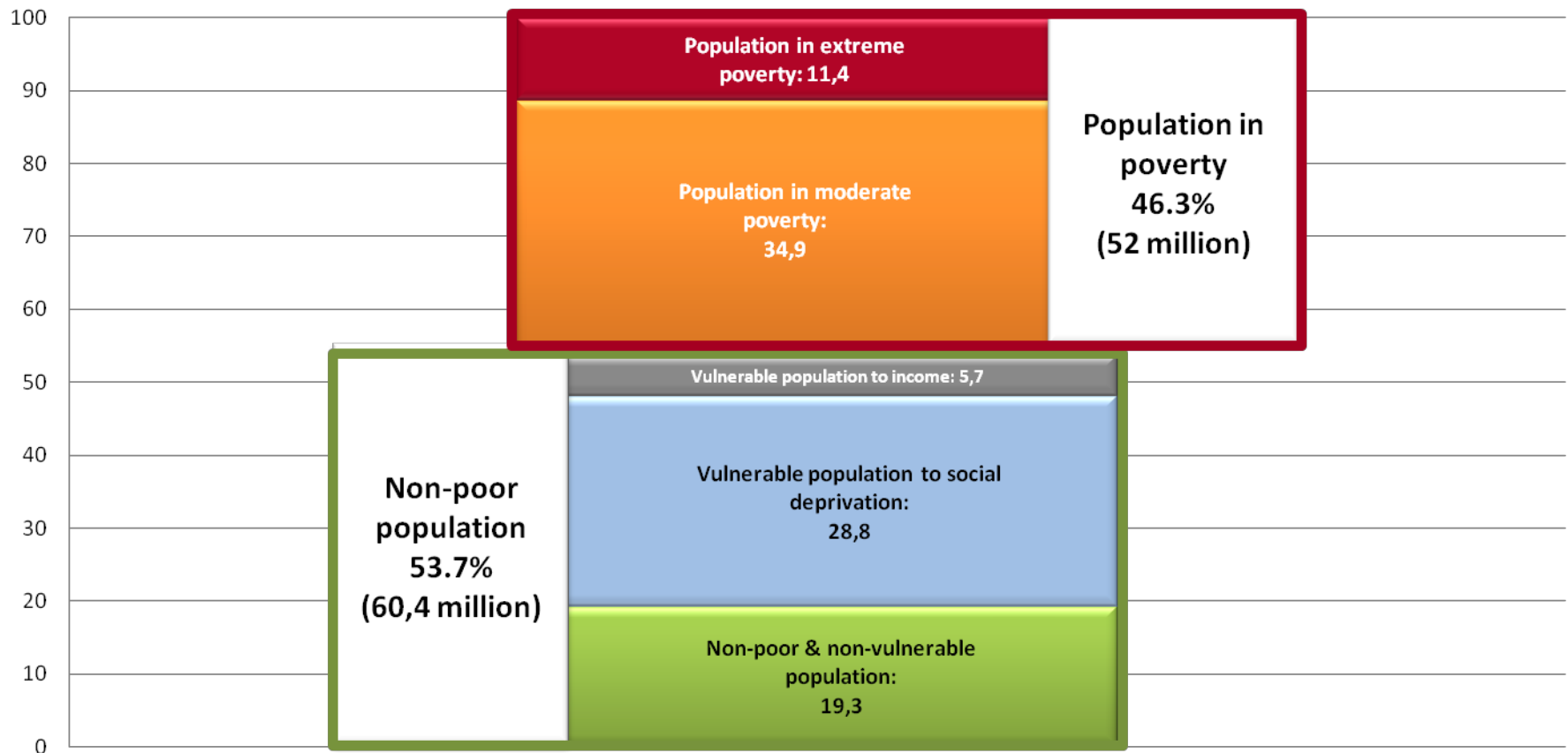


- i. Food poverty: incapability to acquire a basic food basket, even if the entire income available to the household were used just to buy said basket.
- ii. Capabilities poverty: insufficiency of the available income to acquire the food basket and make the necessary expenses in health and education, even if the total household income were devoted solely to these purposes.
- iii. Patrimony poverty: Insufficiency of the available income to acquire the food basket, as well as to make the necessary expenses in health, education, clothing, housing and transportation, even if the entire household income were used exclusively for the acquisition of these goods and services.

b. Current status

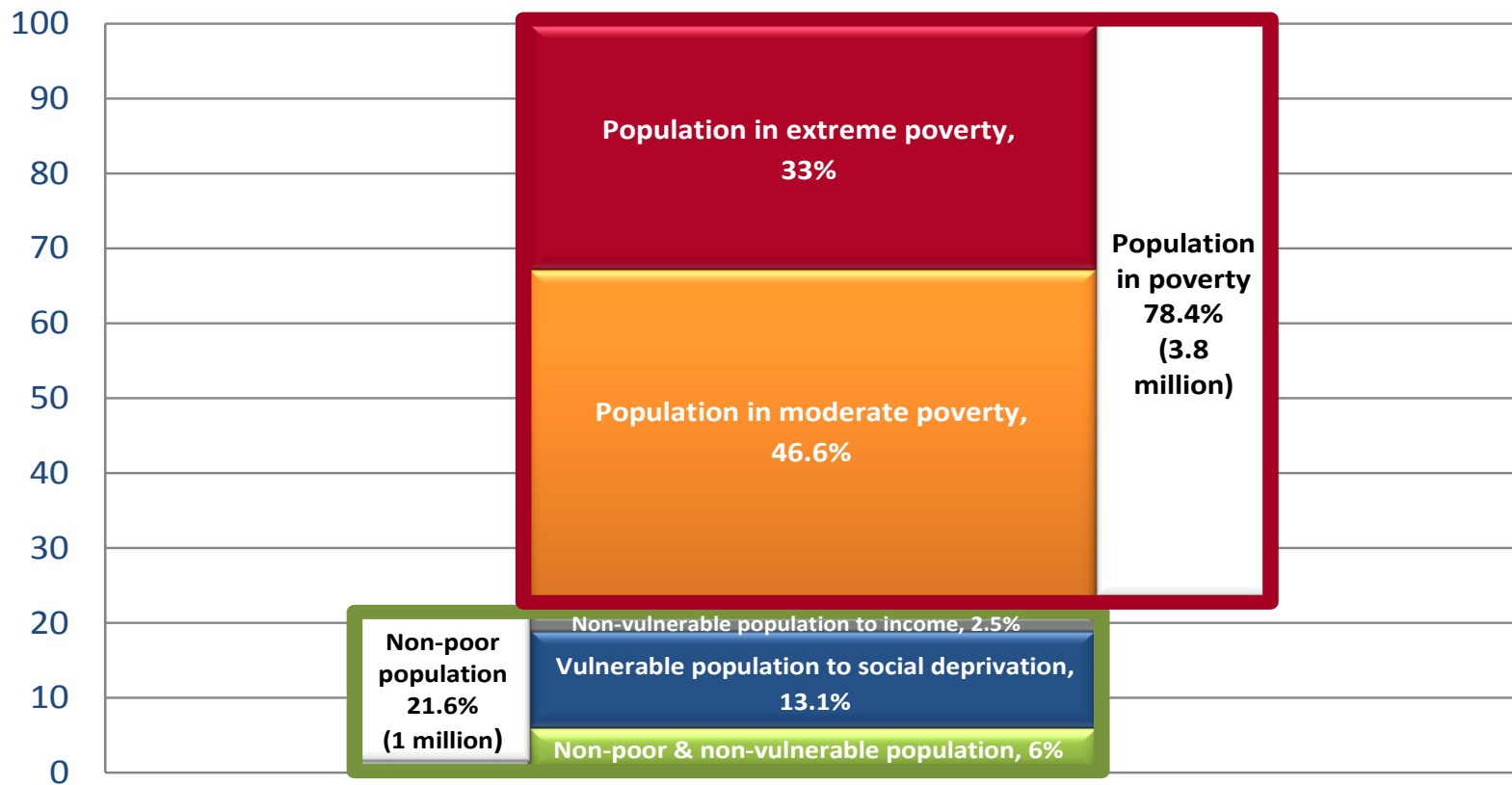
i. National

Poverty, 2010



ii. Chiapas

Poverty in Chiapas, 2010



Source: National Council for the Evaluation of Social Development Policy (CONEVAL).

c. Progres-Oportunidades

- Thought to be executed in a context of sustained economic growth (Levy, 2005)
- Improved nutrition, health, and education are necessary but not sufficient for breaking the intergenerational transmission of poverty (Levy, 2007)
- **No significant impact on higher real wages & net income of the poor** (Levy, 2008)
- **Interaction between *Progres-Oportunidades*, social security and social protection => incoherent incentives => no poverty reduction** (Levy, 2007)
 - (1) lower mean productivity
 - (2) lower competitiveness in the formal sector
 - (3) larger informal sector
 - (4) regular mobility of low-wage workers from formality to informality (and vice versa)
 - (5) failure of the social policy on poverty reduction
- No follow up exists on workers once out of the program => entering formal or informal labor market?(!)

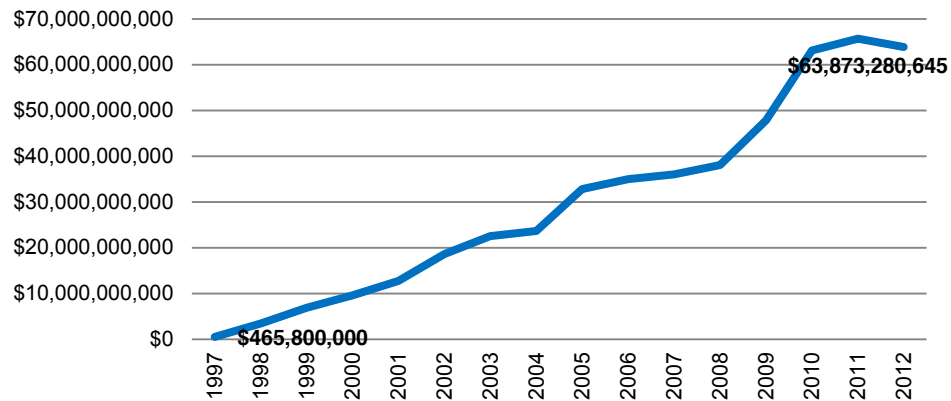
c. Progres-Oportunidades (cont'd)

- **No coordination & complementarity** with local programs for poverty reduction:
 - i. **MDGs** in local Constitution
 - ii. **28** municipalities with the lowest **HDI**
 - iii. **Sustainable rural cities** (with UNDP) to eradicate extreme poverty under **population dispersion** =>
case: Nuevo Juan del Grijalva www.youtube.com/watch?v=s0bzt8C6Gwo
⇒ change resistance due to cultural aspects
- Rent-seeking behavior
- Political economy of poverty reduction
- Lack of link with agricultural and (self)employment programs
- **Local gov't. (Chiapas) on the program** => no much credit on poverty reduction; it does not see much contribution at local level

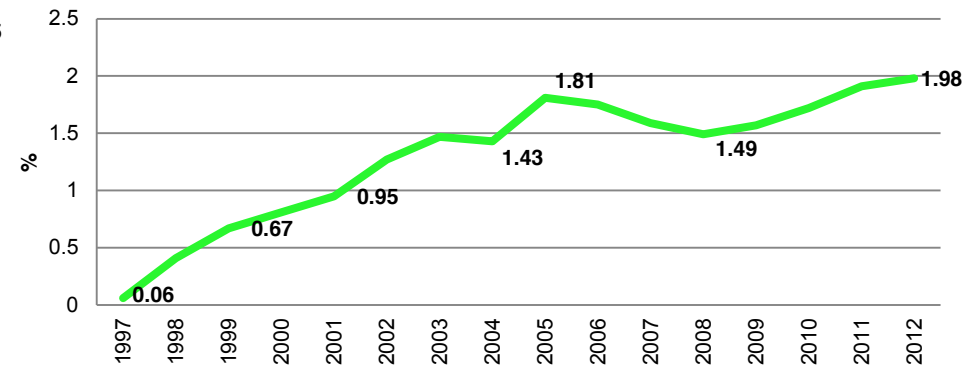


- In Chiapas full coverage: 118 municipalities & 620,681 households

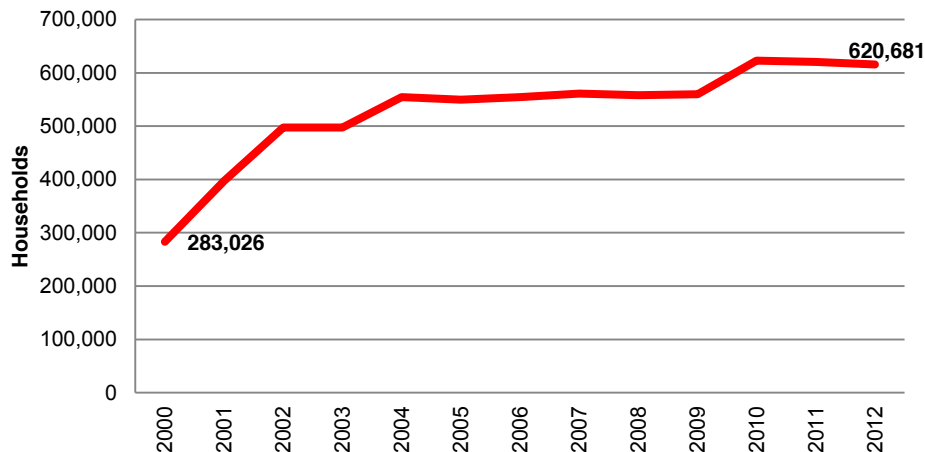
Progres-Oportunidades' total budget, 1997-2011



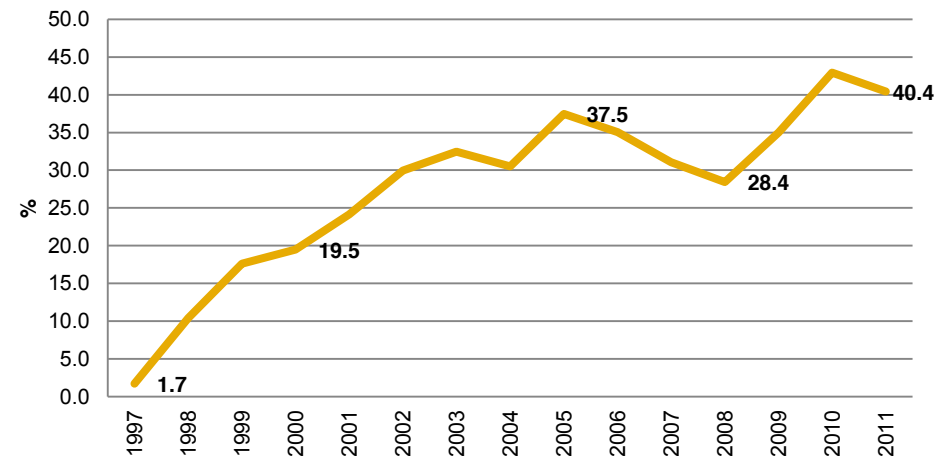
Progres-Oportunidades' budget as a share of total net expenditure, 1997-2012



Progres-Oportunidades households' beneficiaries in Chiapas, 2000-2012

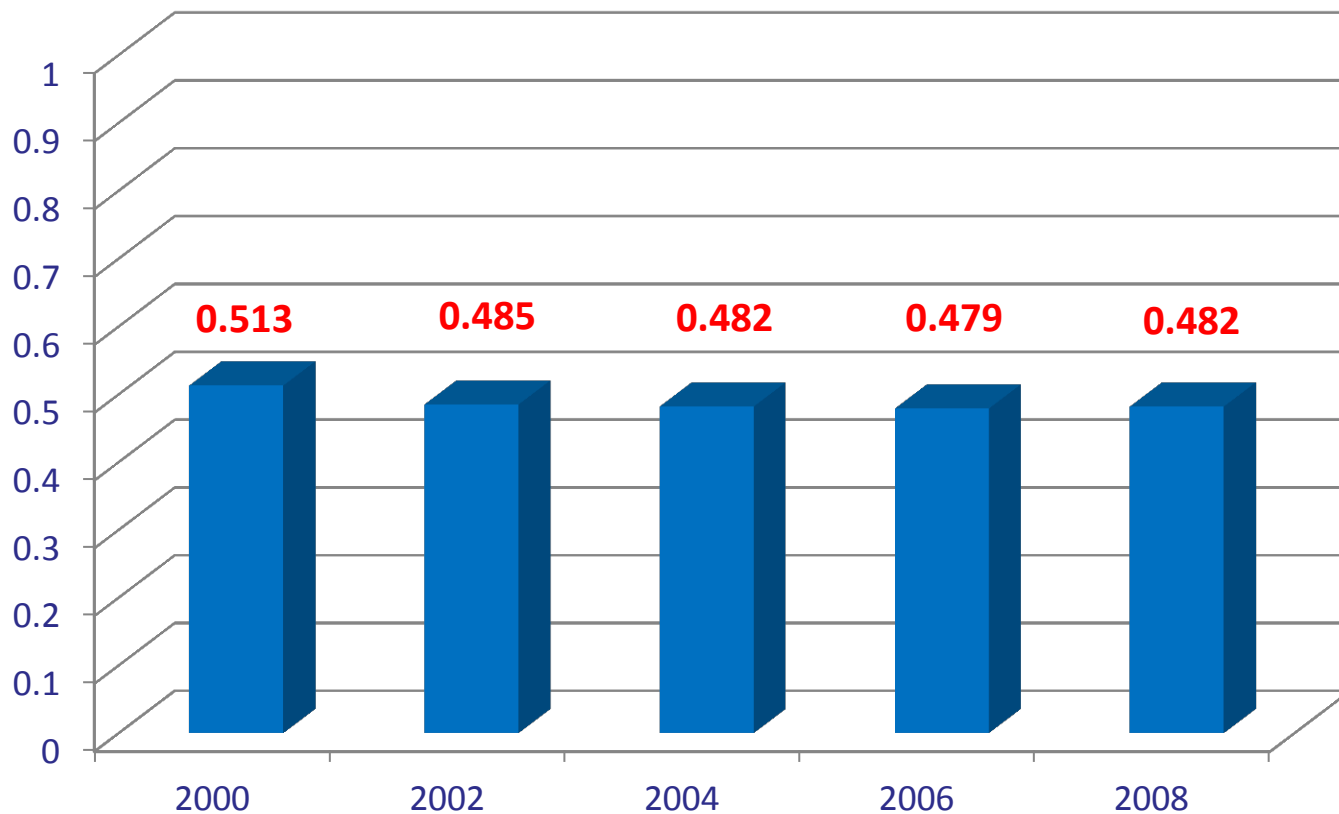


Progres-Oportunidades' budget as a share of total programmable expenditure



III. High inequality

GINI Coefficient in Mexico
2000-2008



Source: Own elaboration with data from the National Institute of Statistics and Geography (INEGI).



National quarterly average total current income per capita by deciles, 2000-2010

(Pesos at constant prices)

Deciles of people	2000	2002	2004	2006	2008	2010
Avg. total current income	8,063.75	7,971.59	8,407.03	9,444.16	9,191.58	8,747.86
I	985.71	1,220.33	1,255.87	1,498.21	1,377.32	978.49
II	1,832.18	2,090.68	2,292.91	2,647.77	2,435.73	2,192.46
III	2,593.80	2,828.46	3,099.75	3,530.58	3,329.43	3,102.81
IV	3,373.03	3,632.25	3,908.33	4,419.82	4,234.95	4,008.84
V	4,308.31	4,501.69	4,782.22	5,363.99	5,248.38	4,993.16
VI	5,417.33	5,561.04	5,841.91	6,577.03	6,468.24	6,205.04
VII	6,813.37	6,894.31	7,257.17	8,090.35	8,032.22	7,579.42
VIII	8,792.69	8,914.81	9,281.37	10,396.29	10,330.26	9,731.51
IX	12,726.51	12,757.43	13,299.92	14,807.25	14,510.71	13,858.75
X	33,794.61	31,314.91	33,050.84	37,110.36	35,948.55	34,828.14

NOTE: The per capita income is calculated by dividing household income by the number of its members.
People are sorted into deciles according to their quarterly current per capita income

*** The quarterly avg. total current income of decile X is 36 times larger than that of decile I in 2010(!)**



Household quarterly current income by deciles and the GINI coefficient CHIAPAS

(Constant prices, 2010)

Households deciles*	2008				2010				Change 2008- 2010
	Households	Income	Average	%	Households	Income	Average	%	
Avg. current income	1 067 247	21 023 193 682	19 699		1 109 578	20 463 212 645	18 442		-6.4
I	106 724	313 218 952	2 935	1.5	110 957	343 787 863	3 098	1.7	5.6
II	106 724	539 329 576	5 053	2.6	110 957	573 625 819	5 170	2.8	2.3
III	106 724	725 735 636	6 800	3.5	110 957	768 179 332	6 923	3.8	1.8
IV	106 724	930 175 270	8 716	4.4	110 957	951 165 805	8 572	4.6	-1.6
V	106 724	1 148 960 640	10 766	5.5	110 957	1 156 549 281	10 423	5.7	-3.2
VI	106 724	1 417 140 119	13 279	6.7	110 957	1 444 166 125	13 016	7.1	-2.0
VII	106 724	1 769 044 908	16 576	8.4	110 957	1 815 811 395	16 365	8.9	-1.3
VIII	106 724	2 348 506 066	22 005	11.2	110 957	2 406 863 471	21 692	11.8	-1.4
IX	106 724	3 510 856 086	32 897	16.7	110 957	3 472 818 110	31 299	17.0	-4.9
X	106 731	8 320 226 430	77 955	39.6	110 965	7 530 245 445	67 861	36.8	-12.9
GINI COEFFICIENT¹			0.494				0.469		

* Households with zero current income are classified in decil I. It is after transfers.

Note: The household quarterly current income of decile X is 22 times larger than that of decile I in 2010(!)

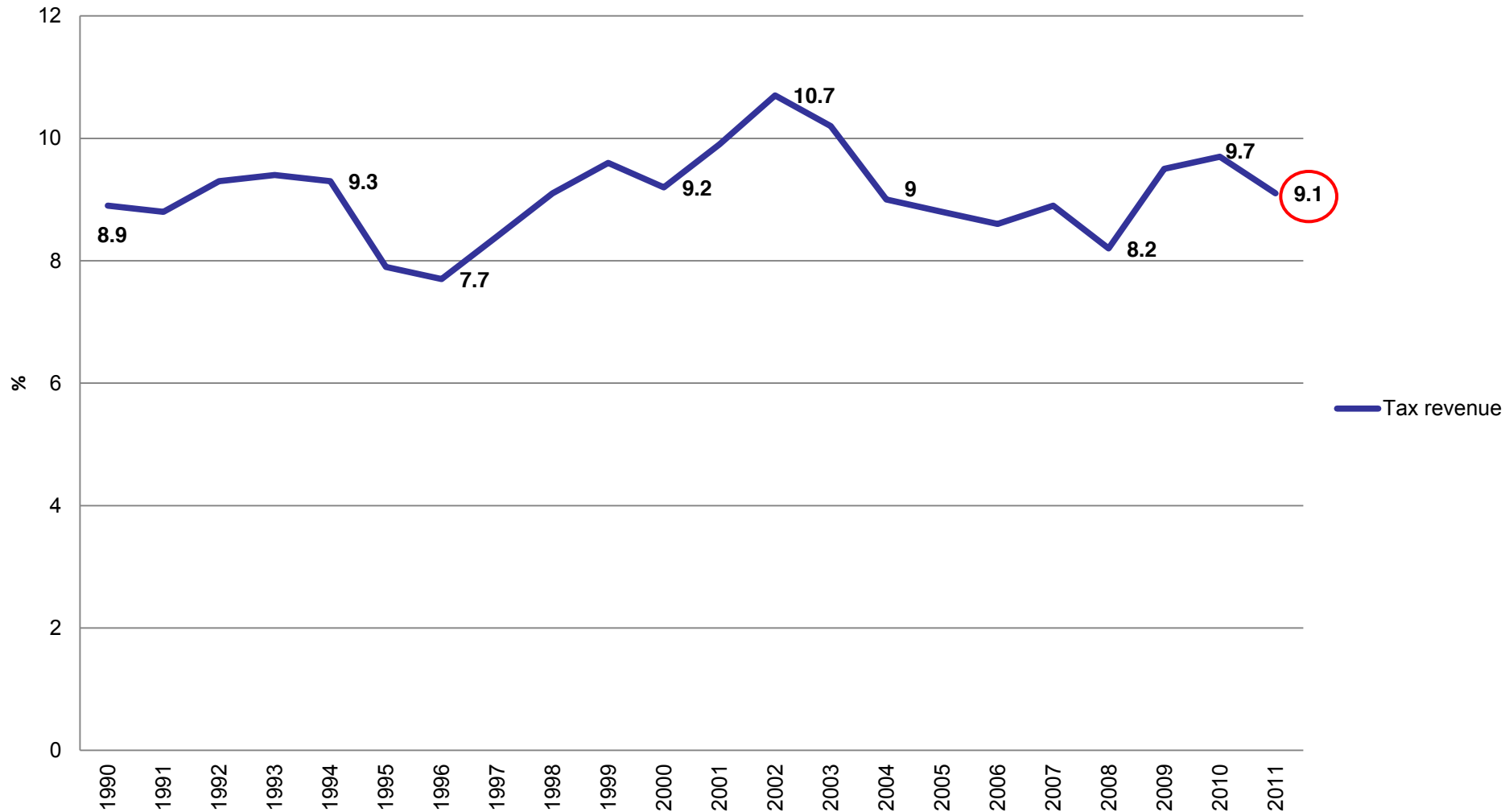


IV. Low tax revenue

At the federal level:

- Tax revenue of 9.1% as a share of GDP (main items) (SHCP, 2011)
- Total tax revenue of 17.4% - including social security contributions (by employers and employees) - as a share of GDP in 2009 (OECD & ECLAC, 2012)

Tax revenue in Mexico as a share of GDP, 1990-2011*

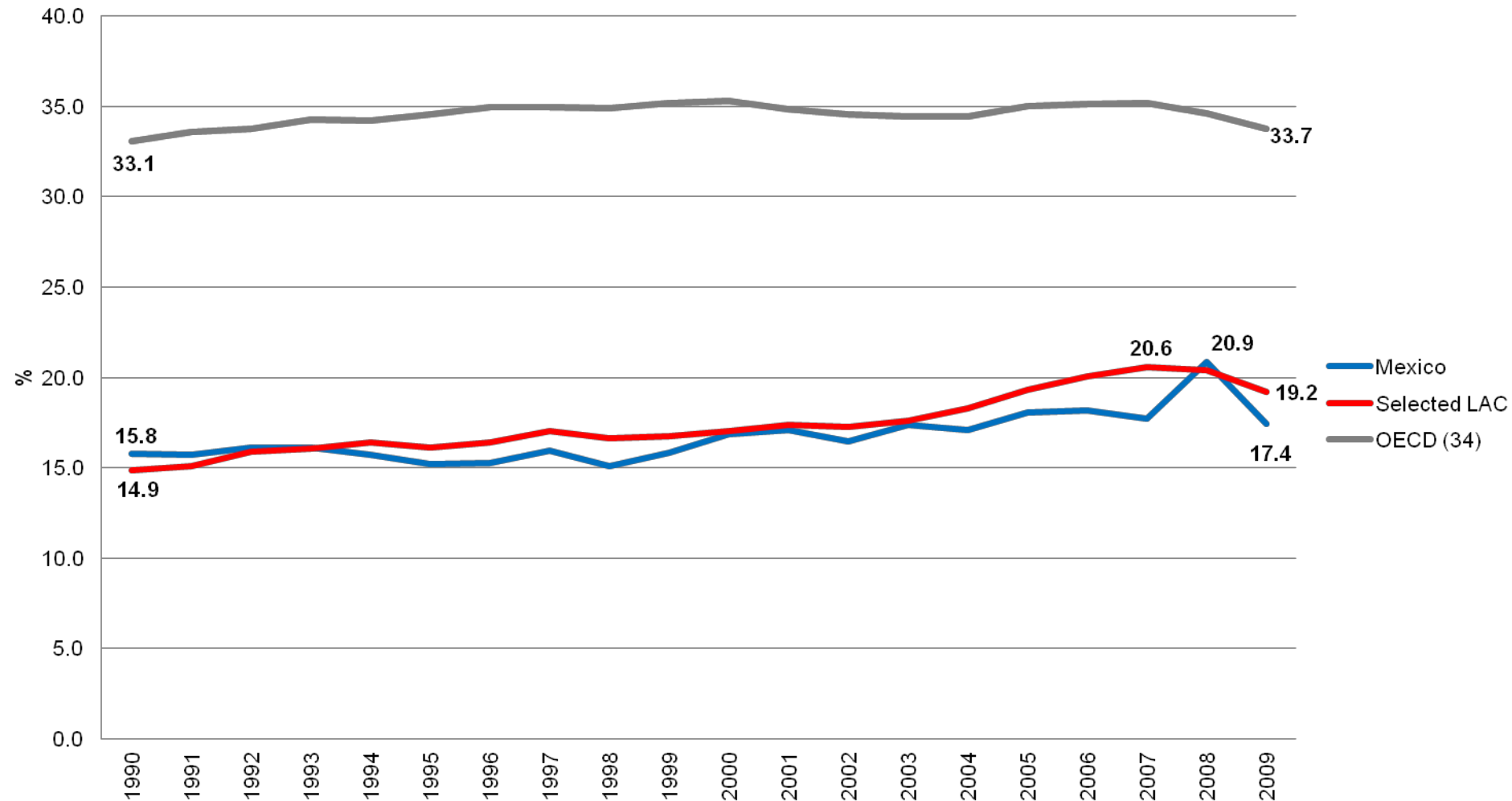


* Tax revenue = non-oil; it includes personal and corporate income taxes; VAT; on production and services; on imports; on oil yields; and other taxes.

Source: Ministry of Finance (SHCP).



Total tax revenue as a share of GDP, 1990-2009*

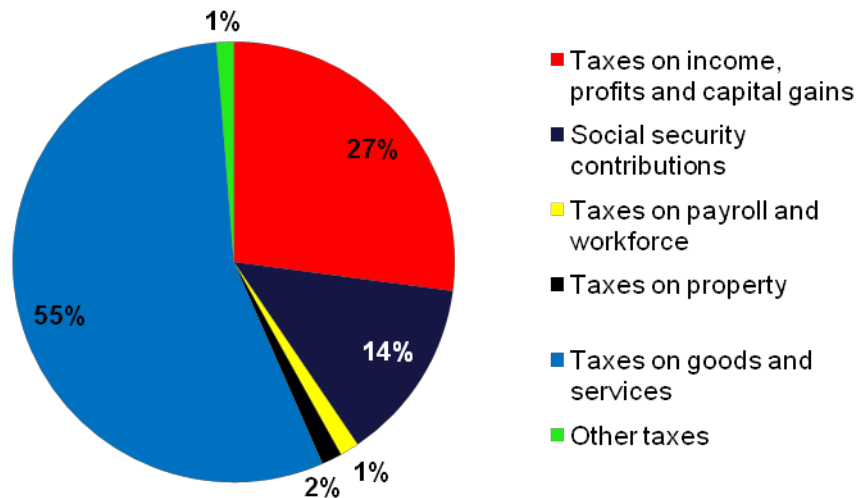


* It includes taxes on oil yields; income, profits & capital gains; social security contributions; on payroll & workforce; on property; on goods & services; etc.¹⁸

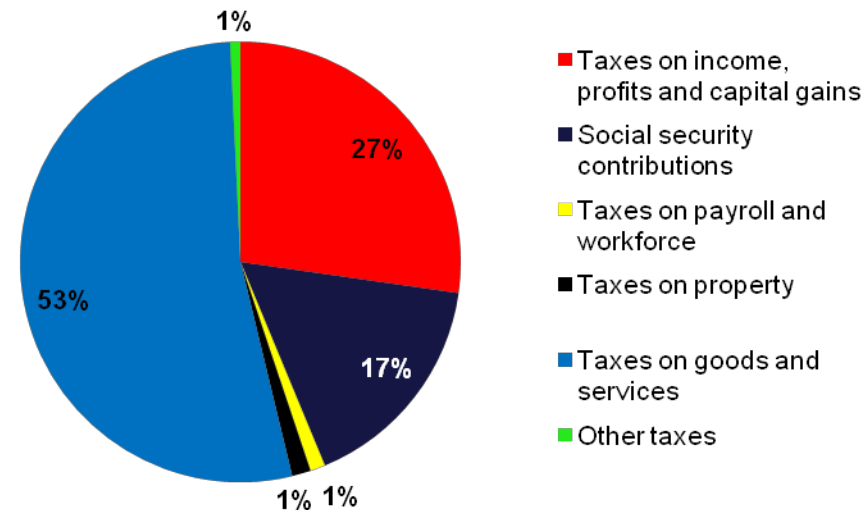
Source: OECD/ECLAC

Structure of tax revenue in Mexico

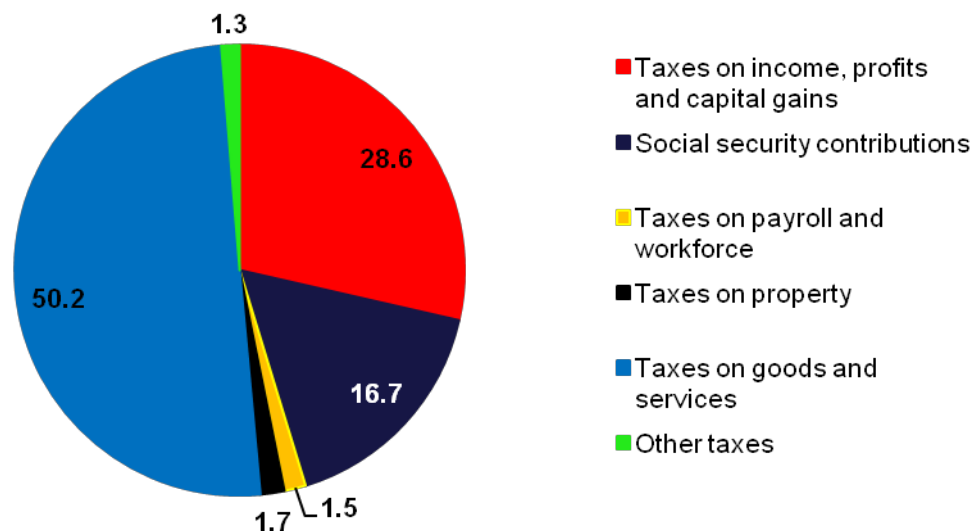
1990



2000



2009



Tax revenue at sub-national level:

- Low tax revenue: 4.5% as a share of total revenue (2004-2010; annual avg.)
- Federal transfers & grants account for 82% as a share of total revenue (2004-2010; annual avg.)

Tax revenue in Chiapas:

- Tax revenue: 1.73% as a share of total revenue in 2009
- Strong dependence pattern => Federal transfers & grants account for 90% of total revenue
- Total own revenue accounts for 1.2% of its total expenditures

V. Distorted labor markets

- Incoherent incentives caused by social security & social protection => different benefits at different costs for workers (Levy, 2007)
- Free social protection benefits => encouraging mobility to informality
- Distortionary payroll tax leading to informality
- Larger informal sector => lower productivity & lower wages, lower growth, lower employment, lower income => persisting poverty
- Evasion of social security by both workers and firms (Levy, 2007)
- Increased demand for social protection => pressure on public finance



3. *Hypothesis*

- A coherent incentive structure and a monetary flow for poverty and inequality reduction can be achieved by applying a pro-growth and pro-poor tax structure to finance social policy in a regional setting through an equalization system of federal transfers for pro-poor targeted investment.

4. Objectives

General objective:



To assess the opportunity cost of financing *Progres-Oportunidades* in the context of the regional setting of Chiapas. **Pro-growth and pro-poor tax structures shall be also explored to finance social policy** and to analyze **alternative strategies to reduce poverty** and enhance rural **development** and rural **growth**. Standard economic analysis tools and modeling will be used, specifically in the regional setting (Chiapas) to elaborate public policy recommendations for inclusive growth and poverty reduction in Mexico.



Specific objectives:

1. To evaluate the opportunity cost of financing *Progres-Oportunidades* and its implications for rural development and rural economic growth in a regional setting (Chiapas). In this context,
2. Pro-growth and pro-poor tax structures are also assessed by applying standard economic analysis tools and modeling to **substantially raise the federal tax revenue to finance the social policy** for poverty and inequality reduction. And,



Specific objectives (cont'd)

3. To explore policies to **improve the federal system of transfers** or grants to finance alternative strategies for poverty and inequality reduction in Chiapas.



5. *Research Questions*

1. What is the opportunity cost of financing *Progres-Oportunidades* and its implication for rural development and rural growth?
2. How to raise the federal fiscal revenue in a sustainable manner by applying a pro-growth and pro-poor tax structure to finance social policy for poverty reduction in a regional setting (Chiapas)?
3. How to achieve an effective allocation of federal transfers or grants in a sustainable manner for poverty and inequality reduction in a regional setting (Chiapas)?

6. Methodology

1. CGE Model*
 - i. SAM (under construction)
 - 7 economic branches, households (by deciles), two governments (national & Chiapas), etc.

* Note: Only 3 preceding works on general equilibrium models for fiscal reform analysis in Mexico => (Kehoe, T & J. Serra, 1983); (Sobarzo, 2004) and (Sobarzo, 2008)

2. General model for equalization transfers (Ahmad & Searle, 2006)



7. References

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