

The assessment of poverty in Mexico; transition from a unidimensional to a multidimensional measurement approach

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Outline

- Unidimensional poverty measurements in Mexico
- Income poverty
- Mexican General Law of Social Development
- Official multidimensional poverty measurement
- Challenges in the poverty measurement

Unidimensional poverty measurement approach in Mexico

Unidimensional poverty measurement approach

- Traditionally measured as income poverty
 - Absolute measurements, contrasting household incomes to poverty lines
- Data from income-expenditure households surveys (ENIGHs)
- National results, sometimes with local representativeness.
- Estimations from international organizations (ECLAC, WB) for regional comparability

Income poverty

- No official definition or methodology to measure income poverty
- In 2001, establishment of the Technical Committee for Poverty Measurement in Mexico (CTMP)
 - Comprised of 7 scholars and government representatives
- Objective: official measurements as reference point for social public policy

Income poverty, characteristics

- Unit of analysis: Household
- 3 poverty lines:
 - INEGI-ECLAC food poverty lines (1992)
 - Capabilities poverty lines (+ education and health)
 - Patrimony poverty lines (+ clothing and footwear, housing, transport)
- Income: total current per capita net income
- Rural/Urban stratification (15,000)
- Periodicity: biannual (from 1992 to 2012)

Income poverty, poverty lines

- Food poverty lines
 - Measures of basic food requirements of the population
 - Estimated from observed consumption patterns in 1984 (ENIGH)
 - Reference population group: which achieve minimum nutritional requirements
 - The lines values were set in 1992; updated every month using Consumer Price Index (CPI) for each food item, not average index
 - Values of lines defined for rural and urban contexts

Income poverty, poverty lines

Group	Products	Urban consumption (1170.7 gr*day)	Rural consumption (1163.5 gr*day)
Cereals and products	Corn, wheat, rice, other cereals	31.6%	24.4%
Meats	Beef, chicken, pork, fish, other meats	9.0%	9.5%
Milk and dairy		12.8%	14.2%
Eggs		3.9%	3.9%
Oils and fats for cook	Vegetable oils and fats, other oils and fats	2.6%	2.9%
Tubers and roots	Potatoes	2.7%	4.0%
Legumes	Beans, other legumes	6.3%	5.3%
Vegetables	Fresh vegetables	8.0%	8.9%
Fruits	Fresh fruits	8.1%	9.9%
Sweets	Sugars, sweets, honey, caramel	5.3%	5.0%
Processed foods	Processed fruits and vegetables	0.8%	1.3%
Soft drinks		9.0%	10.7%

Source: CONEVAL

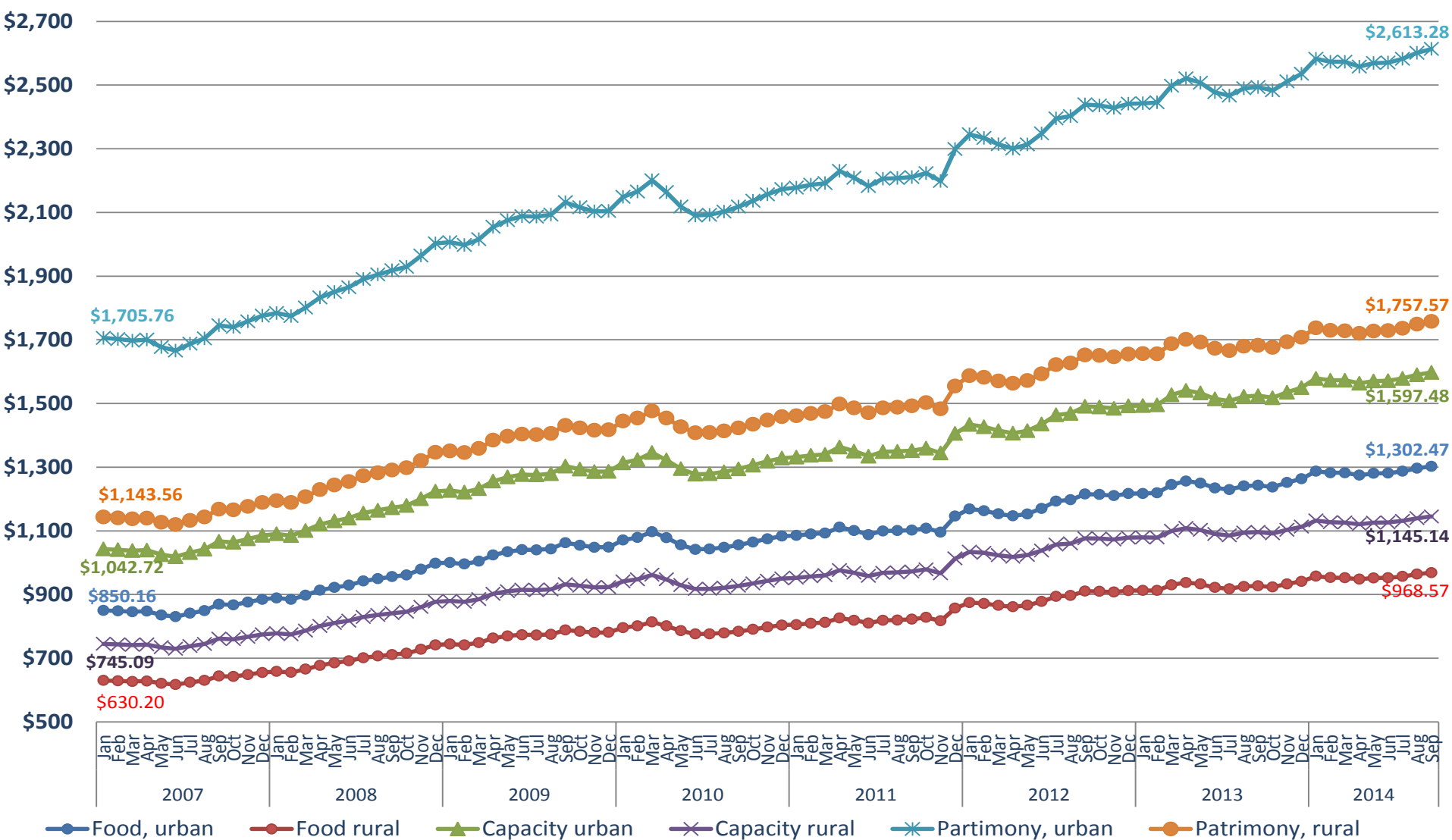
<http://www.coneval.gob.mx/Medicion/Paginas/Evolucion-de-las-dimensiones-de-la-pobreza-1990-2010-.aspx>

Income poverty, poverty lines

- Capabilities and patrimony poverty lines
 - Estimated as the inverse ratio of household expenditure in each bundle of goods and services of each poverty line respect to the total expenditure (Orshansky coefficient)
 - Orshansky coefficients estimated for each population context

Poverty line	Urban	Rural
Capabilities	1.2265	1.1823
Patrimony	2.0064	1.8146

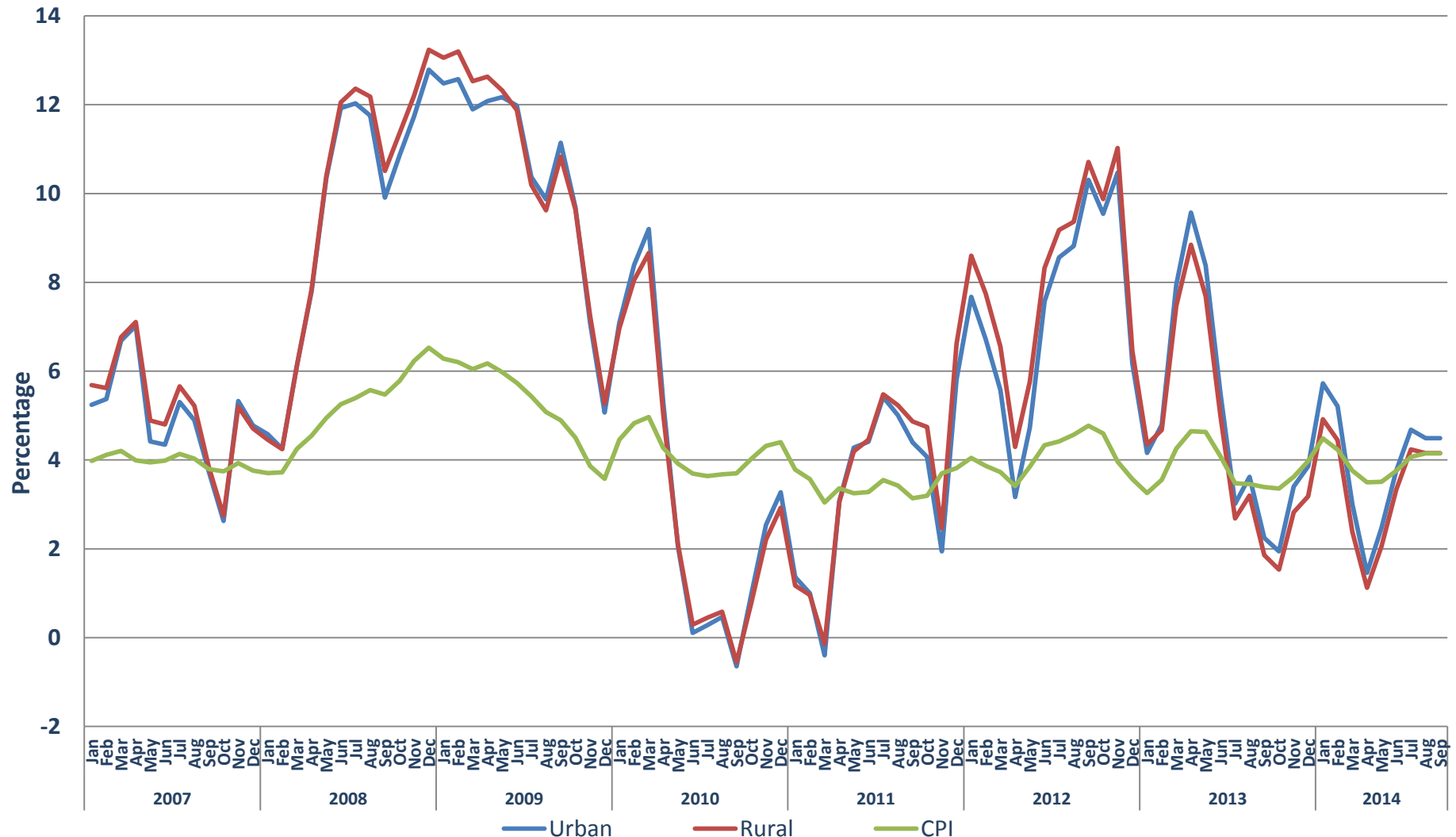
Income poverty, nominal evolution of per capita poverty lines, 2007-2014



Source: CONEVAL

<http://www.coneval.gob.mx/Medicion/Paginas/Evolucion-de-las-dimensiones-de-la-pobreza-1990-2010-.aspx>

Income poverty, evolution of food poverty line and CPI, % variation respect to the same month from the previous year



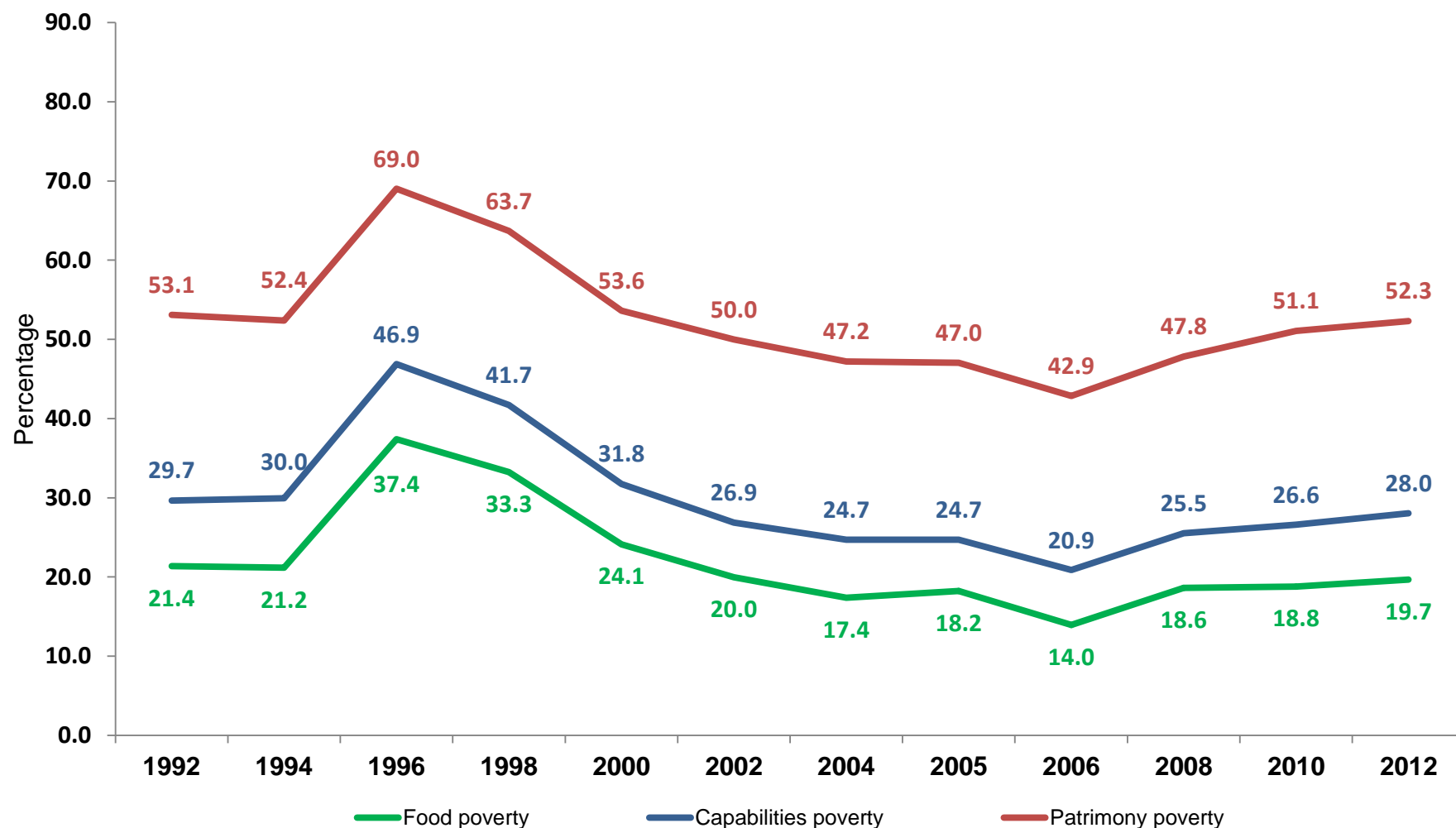
Source: CONEVAL

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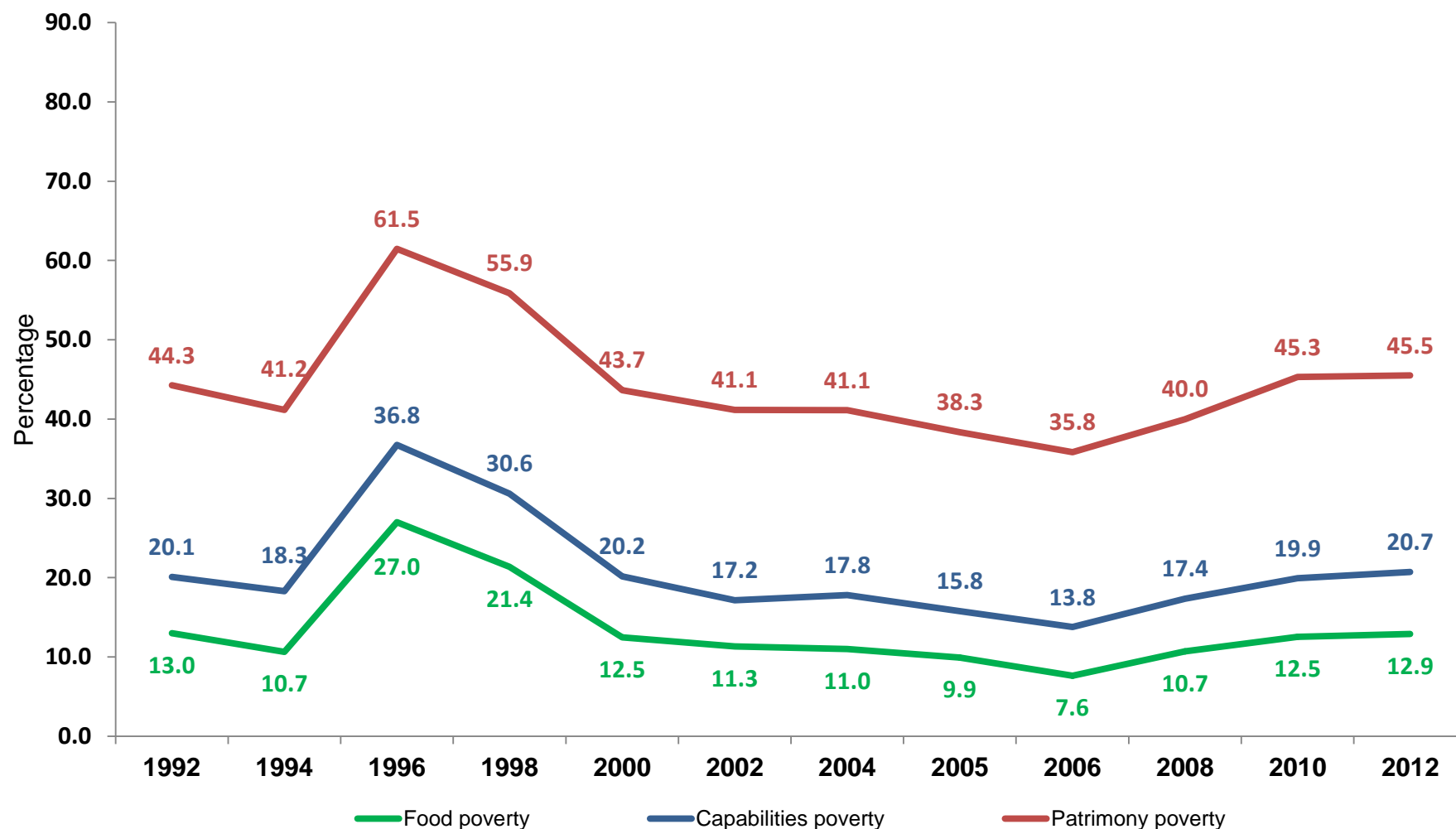
Income poverty, net income sources

- Monetary current income (+)
 - Labour income
 - Own business
 - Property rent
 - Transfers, government, other households
- Non-monetary current income (+)
 - Self-consumption
 - Payments in goods
 - Gifts received by household
- Gifts given by the household to others (-)
- Per capita income, divided between the number of residents in the household

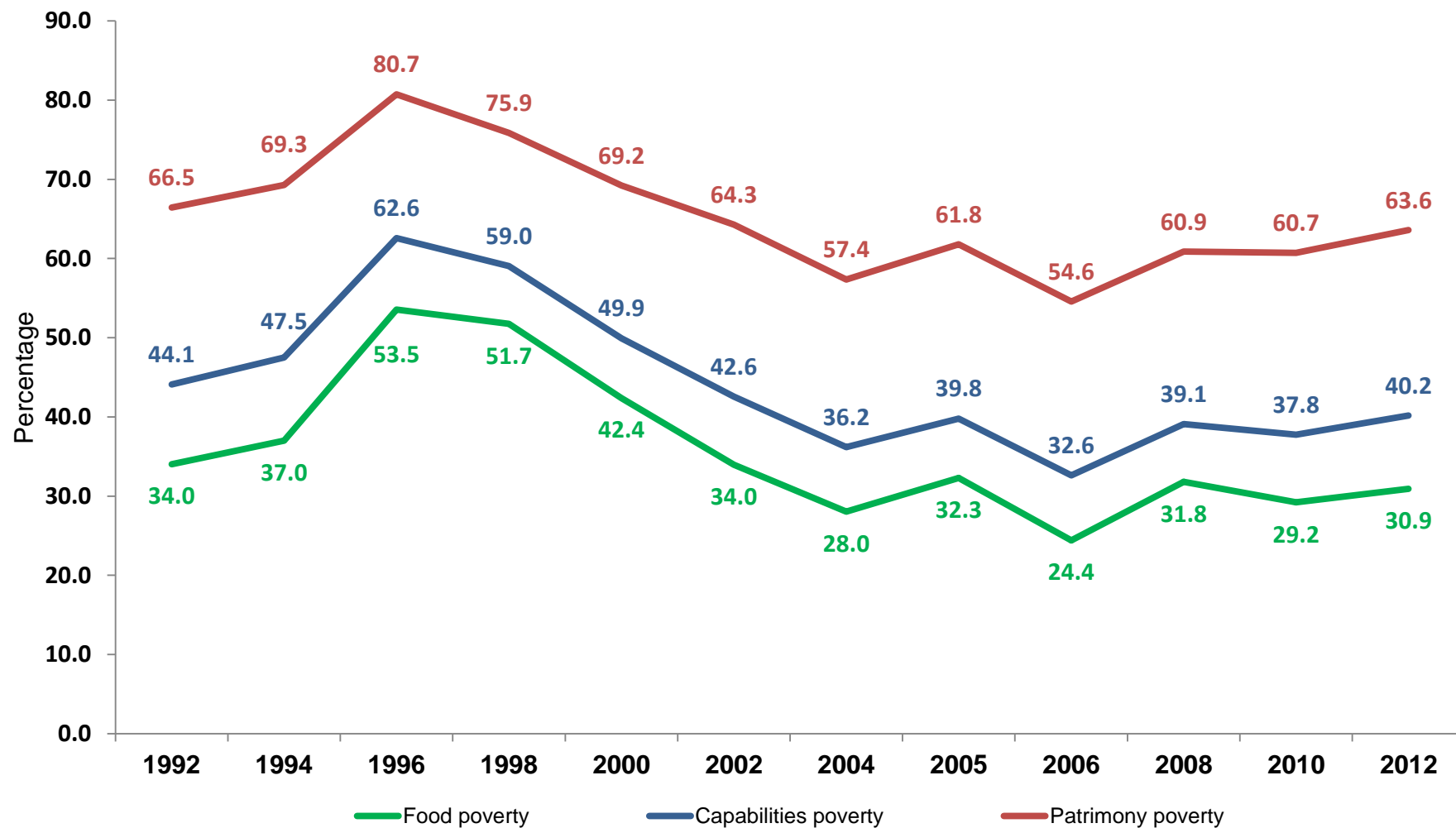
Income poverty, national 1992-2012



Income poverty, urban 1992-2012



Income poverty, rural 1992-2012



Introduction of the General Law of Social Development

General law of social development

- Published in 2004
- Agreed by the Congress unanimously
- Gives the definition of the official poverty estimation in Mexico and its elements
- Considers a multidimensional measurement approach
- Objective:
 - Evaluation of the progress in the social development public policy
 - Represent the poverty concept for the Mexican state

General law of social development

- Creation of the National Council for the Evaluation of Social Development Policy (CONEVAL), established in 2006
- Two main tasks:
 - Evaluation of national social development policy
 - Poverty measurement
- Comprised of 6 non-bureaucrat scholars and one general secretary
- Technical and management autonomy

General law of social development, poverty measurement

- Multidimensional approach based on the coverage of human rights granted by the Mexican Constitution
- 8 non-hierarchical dimensions:
 1. Current income per capita
 2. Education gap
 3. Access to health services
 4. Access to social security
 5. Quality of living spaces
 6. Housing access to basic services
 7. Access to food
 8. Degree of social cohesion
- Coverage
 - National and state level, 2 years
 - Municipalities, 5 years
- Information source: Public information provided by INEGI

Multidimensional poverty measurement approach in Mexico

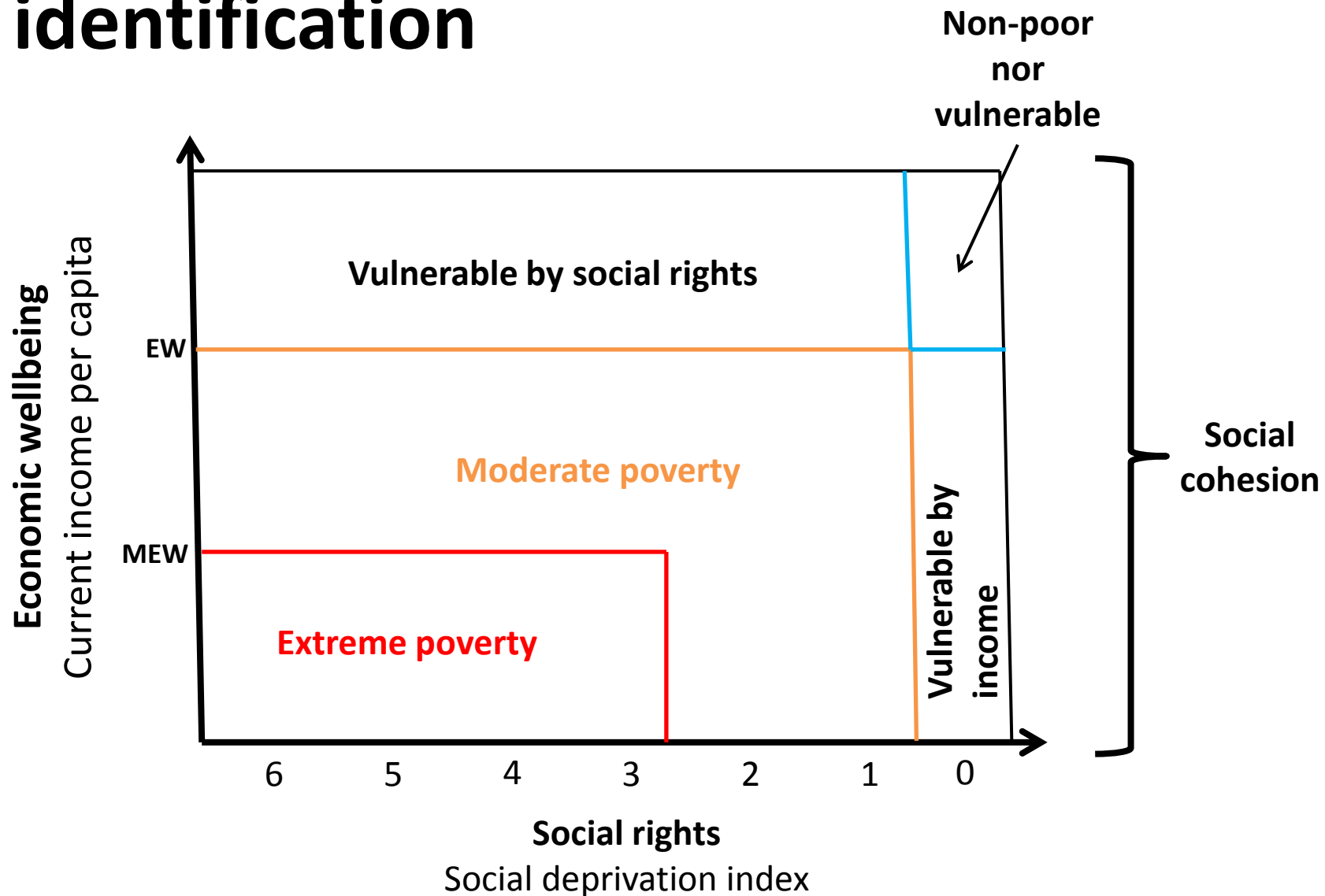
Multidimensional poverty, identification

- Unit of analysis: person/household
- Dual cut-off method
 - Each specific dimension
 - Overall poverty cut-off
- Two basic spaces of identification
 - Social rights, constitutional guaranteed and associated with social deprivation
 - Economic wellbeing: sensible to economic policy and income
- Dimensions within social rights space are equally weighted
- Data sources: ENIGH-MCS
- Rural/Urban stratification (2,500)

Multidimensional poverty, identification

- Social rights (social deprivation index)
 - Education gap
 - Access to health services
 - Access to social security
 - Quality of living spaces
 - Housing access to basic services
 - Food access
- Economic wellbeing (current income per capita)
 - Minimum economic wellbeing (MEW, food poverty)
 - Economic wellbeing (EW, food poverty + non-food poverty bundles of goods and services)

Multidimensional poverty, identification



Multidimensional poverty, thresholds

- **Educational gap**

- Population aged 3-15 years:
 - Not attending to school
- Population 16+
 - Born before 1981, primary level
 - Born after 1982, secondary level

- **Access to health services**

- Not access to any health service provided by public institutions, social security or private medical service

Multidimensional poverty, thresholds

- **Access to social security**

- Direct access: no access to medical services as work benefits, no voluntary enrolment, no retirement investment plan
- Family relations:
 - No voluntary enrolment
 - Partner, child, parent of a non enrolled household head
- Other family relations, no relatives with access to social security
- No beneficiary of pensions through social programs for senior citizens

Multidimensional poverty, thresholds

- **Quality of living spaces, dwelling characteristics**
 - **Roofs**, made from cardboard sheets or residue material
 - **Walls**, made from mud, palm or bamboo; cardboard, metal or asbestos sheets; residual materials
 - **Floors**, dirt floor
 - **Overcrowding**, ratio of people per room greater than 2.5
- **Housing access to basic services**
 - **Water**, obtained from river, lake or truck; public hydrant; another dwelling
 - **Drainage service**, no service; connected to river, lake or sea
 - **Electricity**, no electricity
 - **Cooking fuel**, use of wood or charcoal for cooking without proper ventilation and installations

Multidimensional poverty, thresholds

- **Access to food**

- Identified as food insecurity according with household hunger experiences
- Related with absence of economic resources
- Differentiated by households with and without population under 18 years old
 - Moderate
 - Severe

Multidimensional poverty, thresholds

- **Economic wellbeing (ENIGH 2006)**
 - Minimum economic wellbeing line, food bundles
 - Changes on current consumption patterns
 - Considering caloric and micronutrients requirements
 - Economic wellbeing line, food + non-food bundles
 - Necessary goods and services determined by survey
 - Income elasticity < 1

Population cut: 2,500

No Orshansky coefficient estimated for non-food goods and services. It takes into account all the prices in goods and services

Lines updated every month using CPI for each food item, not average index

Multidimensional poverty, MWB lines composition

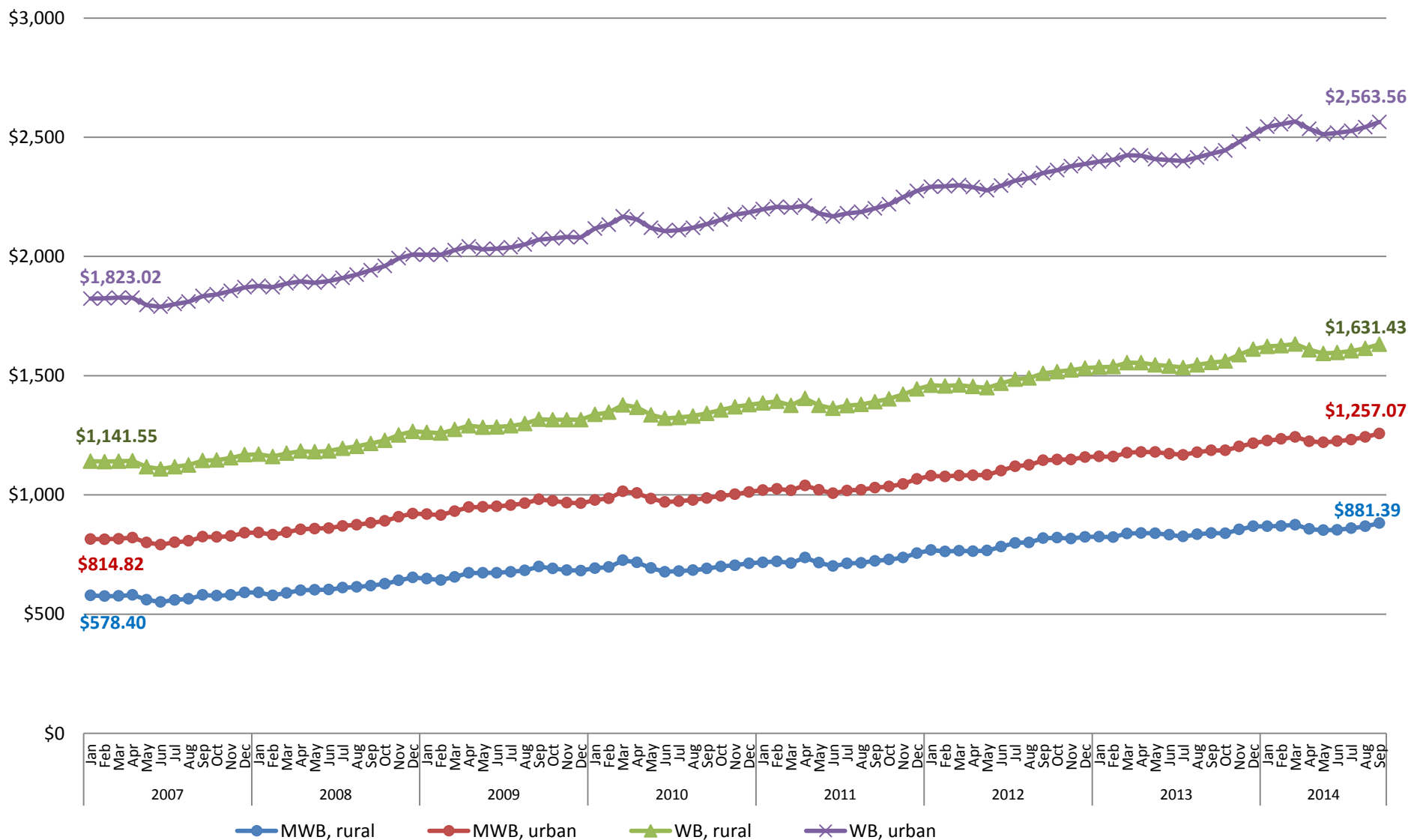
Group	Products in urban line	Products in rural line
Corn	1	2
Wheat	4	4
Rice	1	1
Other cereals	1	0
Beef	2	3
Pork	1	0
Processed meats	2	0
Chicken	3	2
Fresh fish	1	1
Milk	1	2
Cheese	1	1

Group	Products in urban line	Products in rural line
Yogurt	1	0
Eggs	1	1
Vegetable oils	1	1
Fresh tubers	1	1
Fresh vegetables	4	4
Fresh fruits	4	4
Sweets	1	1
Meals to eat at home	1	1
Soft drinks	3	2
Meals outside home	1	1
Other meals	1	1

Multidimensional poverty, WB lines composition

Group	No. of products in urban line	No. of products in rural line
Public transportation	5	4
Cleaning and home care	15	14
Personal care	16	14
Education, culture and recreation	23	18
Communications and car services	6	5
Dwelling services	4	5
Clothing, footwear and accessories	90	98
Glassware, house clothing and housewares	21	20
Healthcare	70	66
Household goods and dwelling maintenance	11	9
Recreation items	6	5
Another expenses	2	3
MWB	-	-
Total	269	261

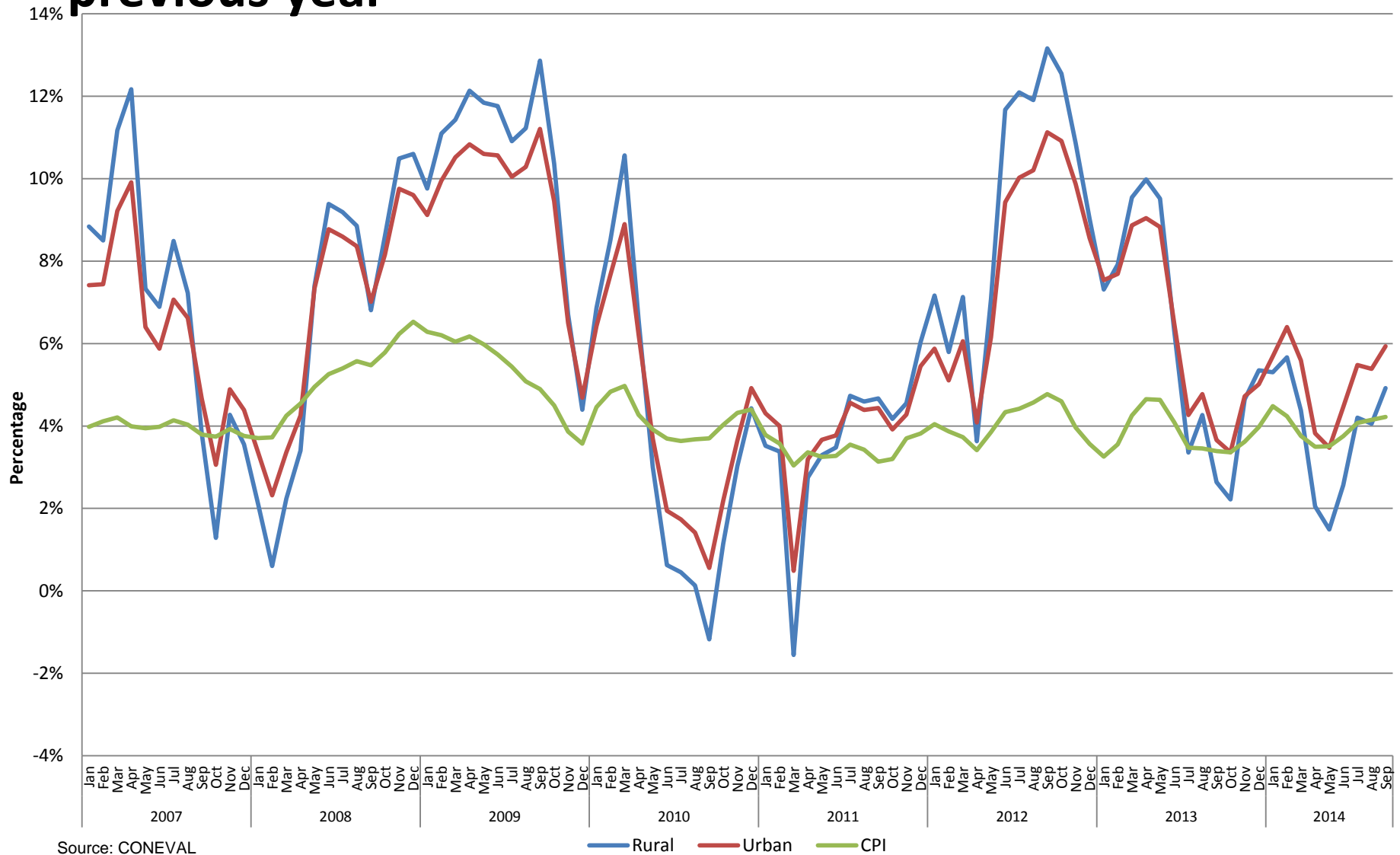
Multidimensional poverty, evolution of nominal MWB and WB lines, 2007-2014



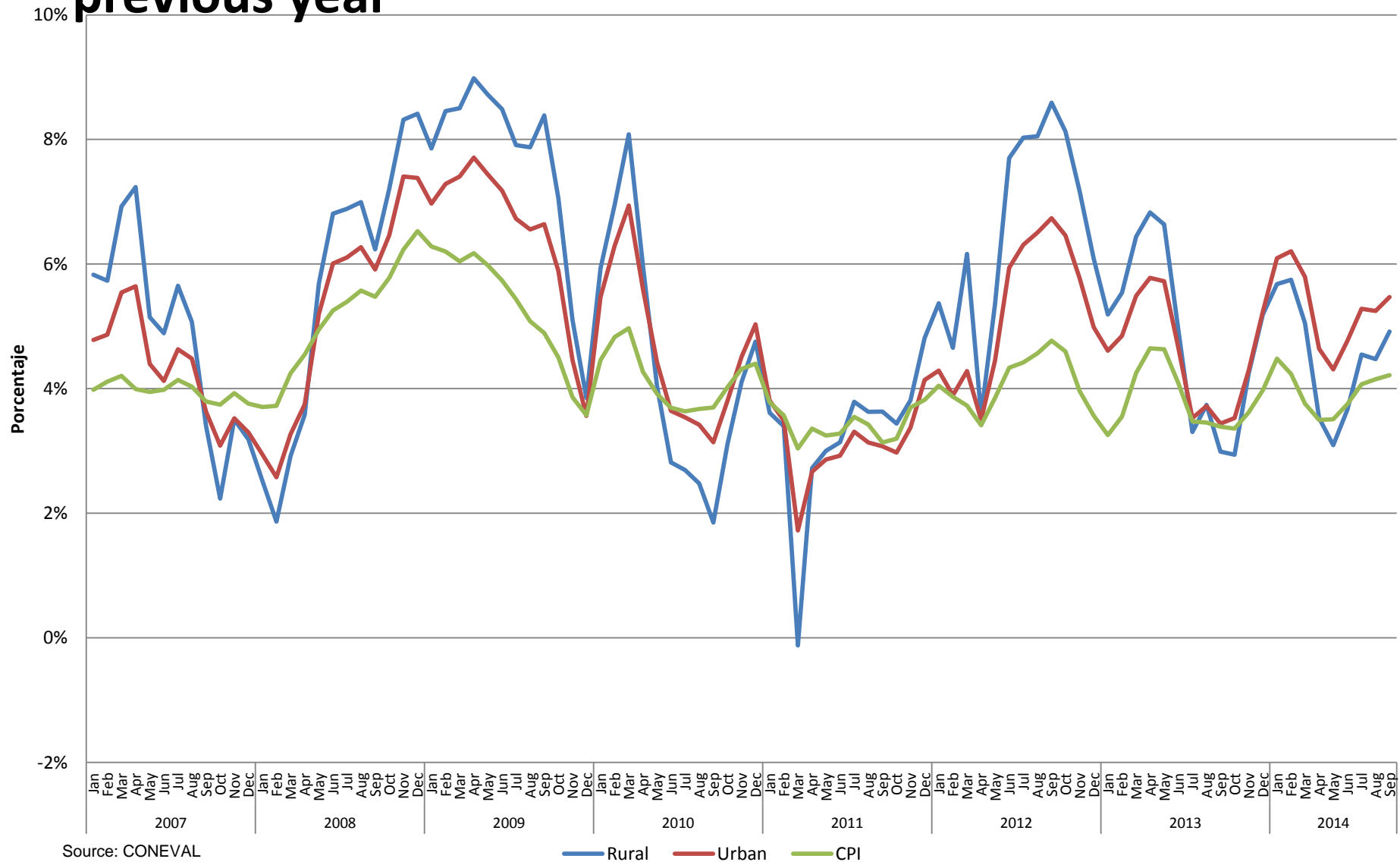
Source: CONEVAL

<http://www.coneval.gob.mx/Medicion/Paginas/Lineas-de-bienestar-y-canasta-basica-en.aspx>

Multidimensional poverty, evolution of MWB and CPI, % variation respect to the same month from the previous year



Multidimensional poverty, evolution of WB and CPI, % variation respect to the same month from the previous year



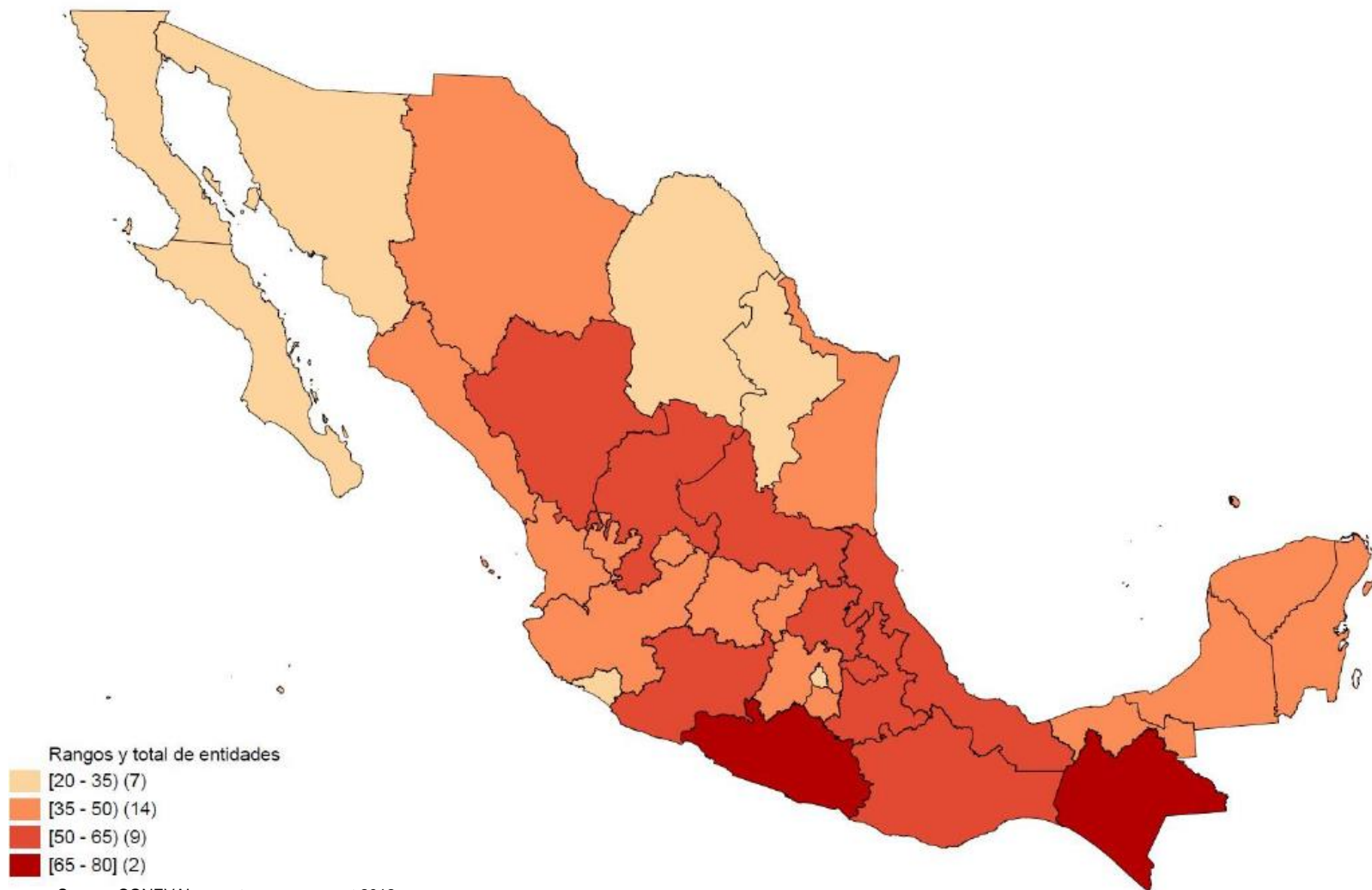
Multidimensional poverty, income sources

- Monetary current income
 - Labour income
 - Own business
 - Property rent
 - Transfers, government, other households
- Non-monetary current income
 - Self-consumption
 - Payments in goods
 - Gifts received by household
- Per capita income, divided between the number of residents in the household adjusted by economies of scale and adult equivalent

Multidimensional poverty, estimation results 2010-2012, national level

Indicators	Estados Unidos Mexicanos					
	Percentage		Million people		Average deprivations	
	2010	2012	2010	2012	2010	2012
Poverty						
Population in poverty condition	46.1	45.5	52.8	53.3	2.6	2.4
Moderate	34.8	35.7	39.8	41.8	2.2	2.0
Extreme	11.3	9.8	13.0	11.5	3.8	3.7
Population vulnerable by social	28.1	28.6	32.1	33.5	1.9	1.8
Population vulnerable by income	5.9	6.2	6.7	7.2	0.0	0.0
Population non-poor and non-vulnerable	19.9	19.8	22.8	23.2	0.0	0.0
Social deprivation						
Social deprivation index	74.2	74.1	85.0	86.9	2.3	2.2
3 or more deprivations	28.2	23.9	32.4	28.1	3.6	3.5
Social deprivations						
Education gap	20.7	19.2	23.7	22.6	3.1	2.9
Access to health services	29.2	21.5	33.5	25.3	3.0	2.8
Access to social security	60.7	61.2	69.6	71.8	2.5	2.3
Quality of living spaces	15.2	13.6	17.4	15.9	3.6	3.4
Housing access to basic services	22.9	21.2	26.3	24.9	3.3	3.2
Access to food	24.8	23.3	28.4	27.4	3.0	2.9
Economic wellbeing						
Income under the MWB line	19.4	20.0	22.2	23.5	2.9	2.5
Income under the WB line	52.0	51.6	59.6	60.6	2.3	2.1

Multidimensional poverty, 2012



Source: CONEVAL poverty measurement 2012, maps

http://www.coneval.gob.mx/Medicion/Paginas/Medici%C3%B3n/Pobreza%202012/pobreza_2012_ingles/Statistical_Annex_poverty_measurement_2012.aspx

Multidimensional extreme poverty, 2012



Source: CONEVAL poverty measurement 2012, maps

http://www.coneval.gob.mx/Medicion/Paginas/Medici%C3%B3n/Pobreza%202012/pobreza_2012_ingles/Statistical_Annex_poverty_measurement_2012.aspx

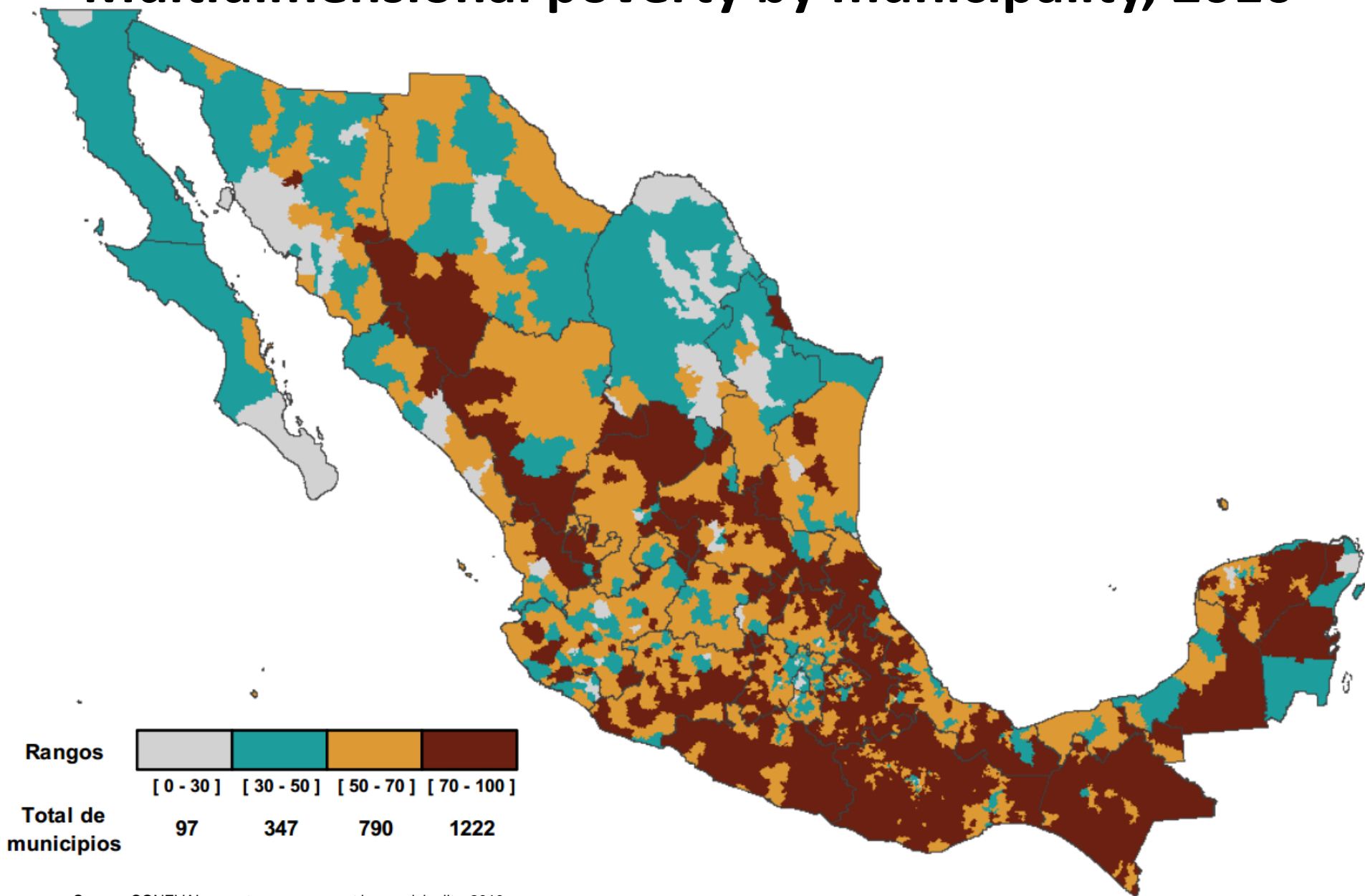
Multidimensional poverty, changes 2010-2012



Source: CONEVAL poverty measurement 2012, maps

http://www.coneval.gob.mx/Medicion/Paginas/Medici%C3%B3n/Pobreza%202012/pobreza_2012_ingles/Statistical_Annex_poverty_measurement_2012.aspx

Multidimensional poverty by municipality, 2010



Source: CONEVAL poverty measurement by municipality, 2010.

http://internet.coneval.gob.mx/informes/Pobreza/Pobreza_municipal/Presentacion/Pobreza_municipios.pdf

Multidimensional poverty, degree of social cohesion

- Estimated under a social polarization approach
 - Gini coefficient
 - Income ratio between population in extreme poverty and
 - Degree of social polarization
 - Social networks perception index

**Conclusions, challenges in the
transition among poverty estimation
methodologies**

Challenges in the transition

- Political consensus, not academic one
- Information availability for state-level estimations
 - Change from ENIGH to ENIGH-MCS
 - Collaborations and costs
- Constant changes in data sets
- Temporary lack of information
 - Information takes 8 months to be processed since their capture
 - 2 years within each measurement (case 2009)

Challenges in the transition

- Update of poverty lines considering changes in consumption patterns
- Regional consumption patterns
 - Consumption patterns are not homogeneous between regions
 - Consumption of some items could be over-sub estimated
- Quality of services, not only access
- Other deprivations not considered in this estimation

Thank you!!!