INCOME DISTRIBUTION DATA REVIEW - MEXICO

1. Available data sources used for reporting on income inequality and poverty

1.1. OECD reporting:

The OECD has been using the same survey for Mexico since 1984: data provided by the Survey of Household Income and Expenditure Survey (Encuesta Nacional de Ingreso y Gastos de los Hogares) computed by the National Office of Statistics (Instituto Nacional de Estadistica y Geografia - INEGI). Currently, the OECD income distribution database contains data for the following (income) years: 1984, 1994, 2000, 2004 and 2008 and 2010.

Data had been revised from 2008 onwards due to a change in methodology. From 2008, household weights have been calibrated with the population and housing census 2010. However, this change had an insignificant impact on data.

1.2. National reporting and reporting in other international agencies:

1.2.1 National reporting:

The following datasets are available for Mexico on income distribution and poverty at a national level:

- CONEVAL (Consejo Nacional de Evaluación de la Política de Desarrollo Social) is also producing data and studies on poverty for Mexico. This National Council for the Evaluation of Social Development Policy broadly aims to regulate and coordinate the evaluation of the Social Development Policy and Programs implemented by public dependencies. The information used by the CONEVAL are also generated by the National Statistics and Geography Institute (INEGI), with a two-year minimum periodicity for state information and five-year minimum periodicity for municipal disaggregation. Please, note that there are using a multi-dimensional approach on poverty that is not comparable with OECD series.

1.2.2 International reporting:

The following datasets are available for Mexico on income distribution and poverty at an international level:

- the *Luxembourg Income Survey* is compiling data for Mexico from the same source as the OECD, the Survey of Household Income and Expenditure Survey (Encuesta Nacional de Ingreso y Gastos de los Hogares). The LIS database contains data for the following income years: 1984, 1989, 1992, 1994, 1996, 1998, 2000, 2002 and 2004. From 1992, data have been available every two years.

Table 1 presents the main characteristics of the different sources:

Table 24. Characteristics of datasets used for income reporting, Mexico

Name	Household Income and Expenditure Survey (Encuesta Nacional de Ingresos y Gastos de los Hogares - ENIGH)	Luxembourg Income Survey
Name of the responsible	National Statistical Institute (Instituto Nacional de Estadistica, Geografia e Informatica – INEGI)	National Statistical Institute (Instituto Nacional de Estadistica, Geografia e Informatica – INEGI)
Goal	To obtain information on the distribution, amount and structure of incomes and expenditures for the household with the final aim of evaluating the developments in the standards of living of the population	
Year	Every other even year	1984, 1989, 1992, 1994, 1996, 1998, 2000, 2002 and 2004
Data collecting frequency	Annually	Same than ENIGH
Covered population	All national or foreign households living in private dwellings in the national territory. Households living in collective dwellings are not included in the sample.	Same than ENIGH
Sample size	In 2004: 22,595 households including 91,738 individuals, of which 91,450 household members (the rest being domestic servants or guests). In 2001: 17,167 households including 72,602 individuals (144 domestic servants or guests).	Same than ENIGH
Sampling method	Stratified multi-phase sample with the dwelling as primary sampling unit: first, basic geostatistical areas (AGEB), stratified according to 5 geographic and socio-economic criteria, are selected, then, for urban areas only, blocks of dwellings, and finally dwellings from each area (rural areas) or block (urban areas).	Same than ENIGH
Sampling unit	Households and individuals	Same than ENIGH
Response rates	In 2004 - 90% of the sampled households were successfully interviewed In 2002 - 86% of the sampled households were successfully interviewed In 2000 - 86% of the sampled households were successfully interviewed	Same than ENIGH
Websource	http://www.inegi.org.mx/default.aspx	http://www.lisdatacenter.org/our-data/lis-database/by-country/mexico-2/

2. Comparison of main results derived from sources used for OECD indicators with alternative sources

2.1 Income

2.1.1 Time series of Gini coefficients and other inequality indicators

Gini coefficients for Mexico are available in the *Luxembourg Income Survey* (LIS), in the *ENIGH* (Encuesta Nacional de Ingresos y Gastos de los Hogares) and in CONEVAL databases.

The ENIGH is calculating three types of Gini coefficients which are calculated both before and after taxes and transfers:

- A Gini coefficient according to the average of the total quarterly income per household and in constant prices (Ingreso corriente total promedio trimestral por hogar – Precios constants);

- A Gini coefficient according to the average of the total quarterly income per capita and in constant prices (Ingreso corriente total promedio trimestral per capita – Precios constants);

- A Gini coefficient according to the average of the total quarterly income per capita and according to equivalence of scales - in constant prices (Ingreso corriente total promedio trimestral per capita ajustado por economias de escala – Precios constants).

For the purposes of this study, OECD data sets are compared with the ENIGH's Gini coefficients according to the average of total quarterly income per capita and in constant prices[37].

In terms of figures, Mexico is still recording very high levels of inequalities. Inequalities increased from 1984 to 1994 up to a Gini of around 0.5 (0.519 as per the OECD and ENIGH and 0.4850 as per LIS). After 1994 onwards, Gini coefficients declined. The *Luxembourg Income Survey* recorded a decrease from 0.485 in 1994 down to 0.457 in 2004, and the OECD series from 0.519 to 0.473. These are significant changes. In 2010, the latest available Gini coefficient was estimated at 0.46 according to the OECD.

Note that CONEVAL published a few GINI coefficients in some of their publications based in ENIGH data. They recorded higher Gini coefficients but with a similar trend than ENIGH.

Very logically, data are very similar, even identical, between the OECD, the ENIGH and the ENIGH with OECD methodology. The LIS time-series on Gini coefficients is following a very similar trend while recording Gini coefficients slightly below the ones from the OECD ones. On average, over the period of comparison from 1984 to 2004, the spread between the OECD and LIS remained constant about 0.02.

**Figure 40.   Trends in Gini coefficients (at disposal income)**
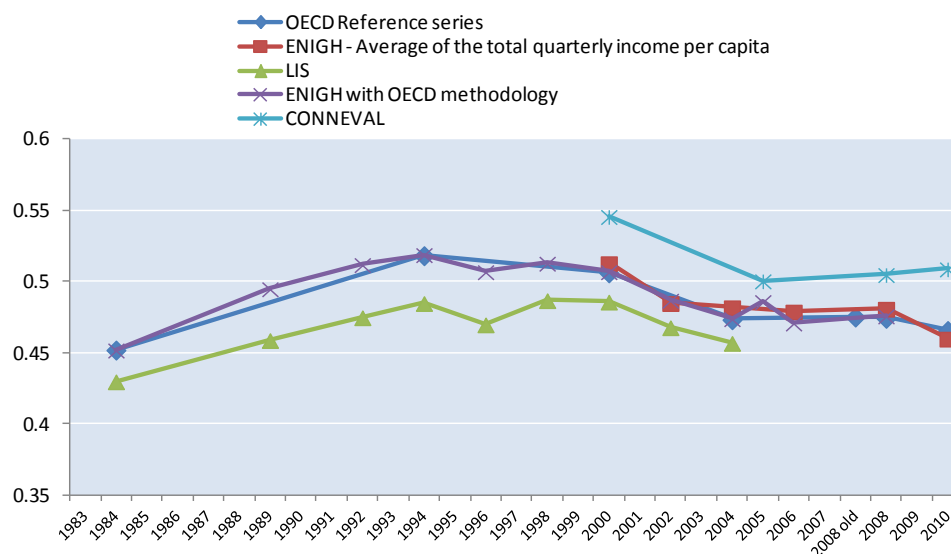
The series on income inequality ratio are following the same trend than the Gini coefficients. The OECD references series showed that the S80/S20 ratio increased from 1984 to 1994 to reach a ratio of 15.5. From 1994 onwards, this ratio recorded a slight and continuous decline down to 12.7 in 2010.

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[37]   I.e., *Se refiere al Ingreso Corriente Total promedio trimestral por persona a precios constantes del 2010,* *http://www.inegi.org.mx/sistemas/sisept/default.aspx?t=ming10&c=22214&s=est*

The series published by ENIGH show a very similar pattern than the OECD ones. On average, from 2000 to 2010, there is a difference of 1 percentage point between the two time-series.

Figure 41.   Trends in S80/S20
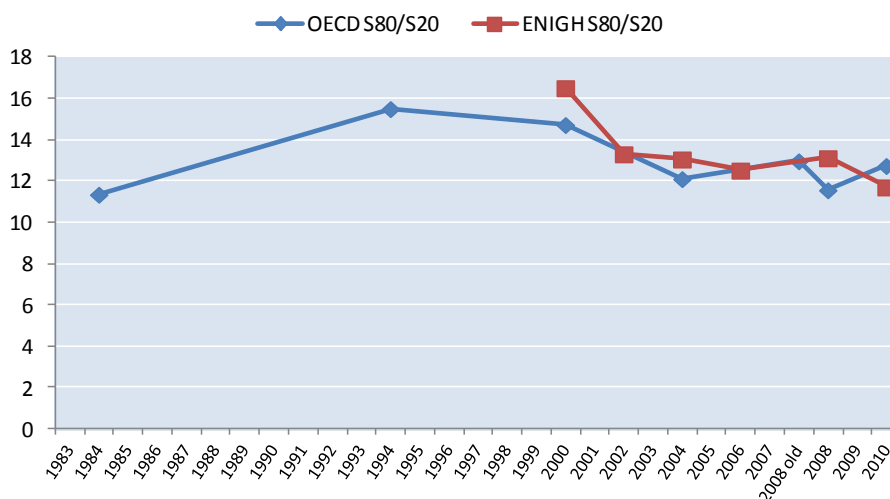
Similarly than the study of the S80/S20 ratios, the OECD time-series is recording an increase of the income inequality ratio from 1984 to 1994 to 33.52%. After that date, this ratio progressively declined down to a level of 28.525% in 2010 which is still higher than the level recorded in 1984.

The series published by ENIGH show a similar pattern than the OECD ones. Data can be compared only from 2000 onwards (data were not available before that date for ENIGH). This income inequality ratio decreased more significantly for ENIGH than for the OECD as these figures moved from 34.2% in 2000 down to 23.1% in 2010 for ENIGH. For the OECD, these ratios decreased from 30.6% to 28.5% over the same time period.

Some income inequalities ratios had been found for CONEVAL but there have been found only for two years so it is not representative of a long-term trend. Still, a delinking trend in the early 2000s is confirmed.

2.1.2 Time series of poverty rates

In Mexico, CONEVAL is the institution in charge of measuring poverty. Traditionally, poverty measurement in Mexico has been developed from a one-dimensional perspective, where income is used as an approximation to the population's economic wellbeing. Since 2008, CONEVAL adopted a new methodology for poverty measurement which is multidimensional. Poverty is measured in two basic spaces: income, ie. well-being and deprivation, ie. social rights.

According to this new conception, a person is considered in situation of multidimensional poverty when his/her income is insufficient to acquire the goods and services he/she requires to satisfy his/her needs and presents deprivation in at least one of the following six indicators: educational gap, access to healthcare, access to social security, housing quality and spaces, basic services in homes and access to food.

With this methodology, CONEVAL can identify the percentage of population in situation of multidimensional poverty (extreme poverty and moderate poverty) and the percentage of situation in social deprivation.

However, this unique Mexican framework prevents to undertake any comparison regarding poverty indicators with other datasets. Indeed, even if we consider only income poverty situation, the poverty line in Mexico is expressed based on the monetary value of a basic goods and services basket. According to the Poverty Measurement Methodology, the income employed for this measurement is the Total Current Net Income Per Capita (INTPC) and the poverty thresholds are defined in three levels:

- 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 goods.

- Capabilities poverty: Insufficiency of the available income to acquire the food basket value and make the necessary expenses in health and education, even if the total household income were devoted solely to these purposes.

- 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.

These three poverty thresholds are different from the relative poverty threshold defined by the OECD which is expressed as a given percentage of the median disposable income, expressed in nominal terms (current prices).

CONEVAL also calculates the percentage of population living below the minimum wellbeing which can be defined as "the monetary value of a basic food basket in a particular month. For purposes of poverty measure, the reference value of the basket is the month of August of the year when the measurement is held. This line is calculated for rural and urban areas[38]". However, this figure is also different from the OECD poverty line. Data on poverty as defined by CONEVAL are available from 2008 onwards when the new methodology has been adopted.

Therefore, the OECD time-series on income poverty rates can be compared only with the Luxembourg Income Survey which is based on ENIGH figures. Thus, OECD and LIS are using the same datasets and the point's lines are consequently very similar on poverty rates. On the three years of comparison, 1994, 2000 and 2004, data vary of 0.2 point with the exception of 1994 where the spread between the two time series was of one percentage point.

In terms of analysis, poverty rates remained stable around 20% over the all period of time from 1984 – 2010. Since 2004, poverty is rising again after registered a minor decline over the previous decade. In 2010 which is the latest available data, 20.41% of the Mexican people live with less than 50% of the median income according to the OECD.
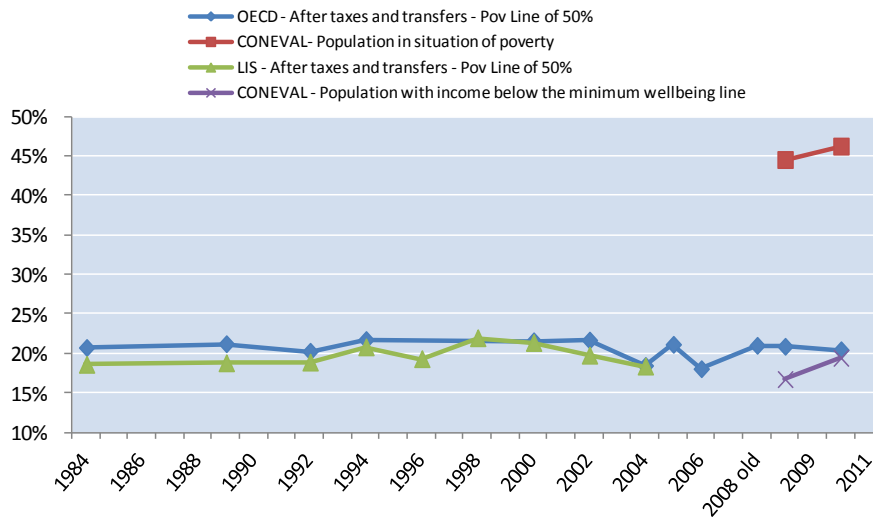
While presenting different types of poverty calculation, CONEVAL has been recording an increase of inequalities from 2008 to 2010. As per this institute, 46% of the Mexican was living in a situation of poverty in 2010 which is representing 52 millions of individuals.
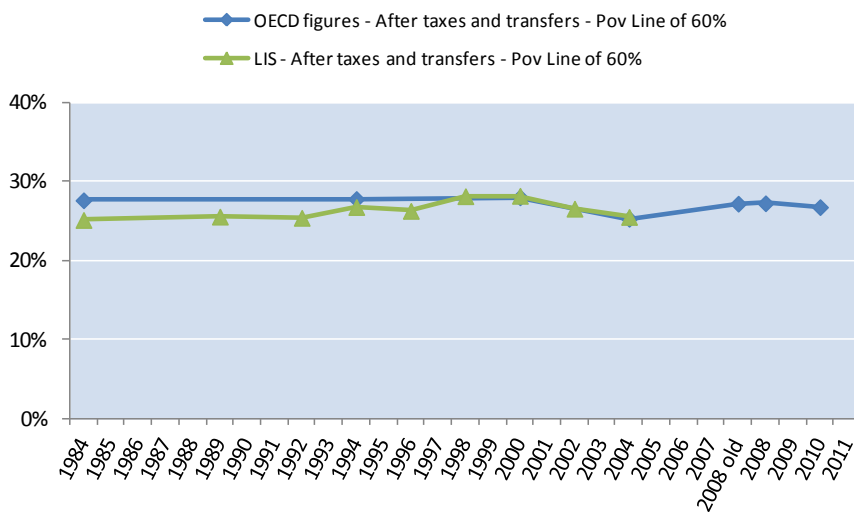
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[38]   http://www.coneval.gob.mx/cmsconeval/rw/pages/medicion/glosario.en.do

Figure 42.   Trends in Poverty rates, with a 50% threshold

- OECD - After taxes and transfers - Pov Line of 50%
- CONEVAL- Population in situation of poverty
- LIS - After taxes and transfers - Pov Line of 50%
- CONEVAL - Population with income below the minimum wellbeing line

Regarding the poverty line with a 60% threshold, OECD time-series on poverty rates can again be compared only with the Luxembourg Income Survey. Similarly to the poverty line with a 50% threshold, data are very similar between the OECD and LIS. Over the three years of comparison, 1994, 2000 and 2004, data vary of 0.2 point with the exception of 1994 where the spread between the two time series is of one percentage point.

From 1984 to 2000, the share of Mexican living with less than 60% of the median income rose from 25.1% to 28%. Since 2000, this figure declined down to 25% in 2004 before recording new increases until 2010. In 2010, which is the latest available data from the OECD, the poverty rate with a 60% threshold was estimated at 26.7%.

Figure 43.   Trends in Poverty rates with a 60% threshold

- OECD figures - After taxes and transfers - Pov Line of 60%
- LIS - After taxes and transfers - Pov Line of 60%

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2.2   *Wages*

See Part II of the present Quality Review.

3.   **Consistency of income components shares with alternative data sources**

3.1. *Comparison of main aggregates: earnings, self-employment income, capital income, transfers and direct taxes*

Table 2 shows shares of income components for the latest available year, according to the OECD benchmark series. Unfortunately, such information is not available for the other data sources described in table 1.

Table 2. Shares of income components in total disposable income, OECD reference series

				Average income			Average income	K	SE	TR	TA	HDI
	Survey	Year	Unit	EH	ES	EO	Wages	Capital	Self Employment	Transfers	Taxes	Disposable income (HDI)
OECD reference suvery	OECD reference suvery	2010	natcur	22287.9	5572.7	13189.4	41,050	3522.3	6508.800516	5124.34	0	56205.4488
			% av HDI	39.7%			73.0%	6.3%	11.6%	9.1%	0.0%	

Figure 6 compares the trend in shares of public cash transfers in equivalised disposable income from the OECD reference series with the share of total cash social spending in net national income, reported from the OECD Social Expenditure database (OECD SOCX). OECD SOCX series include pensions, incapacity, family, unemployment, social assistance. Both series show similar trends throughout the period. To note that the increase of public social transfers is more significant according to the OECD reference series than to the OECD Social Expenditure database (OECD SOCX).

Figure 6. Trends in shares of public social transfers
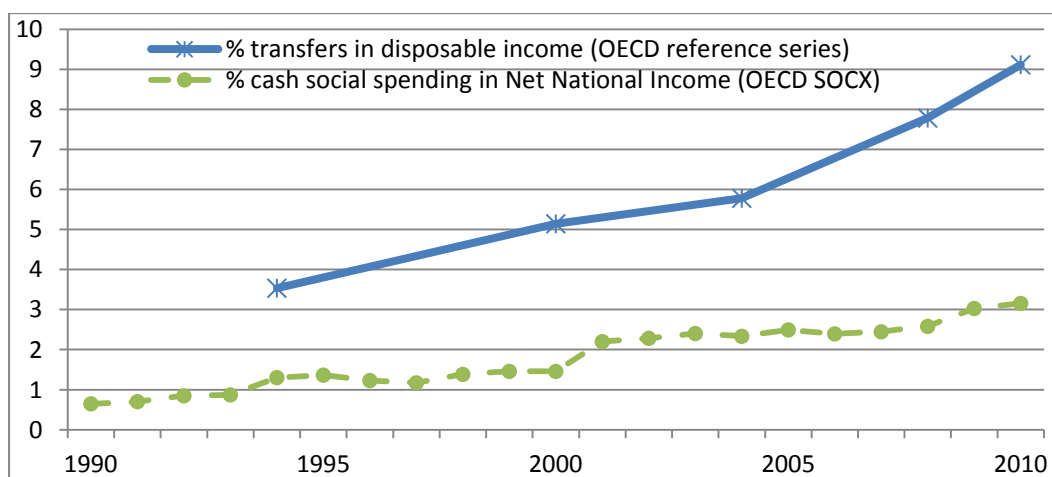
4.   **Metadata of data sources which should explain differences and inconsistencies**

Regarding the income inequality ratios, the OECD time-series cannot be compared with complete validity with the LIS data due to a slightly different methodology.

Regarding the comparison on poverty rates, the data provided by CONEVAL cannot be compared with the OECD ones as this office is measuring poverty over a multidimensional approach.

5.   Summary evaluation

Comparisons of alternative data with the OECD time-series are largely based on the same survey, the ENIGH.

Regarding the estimates for Gini coefficients, the following remarks can be pointed out:

- There is a similar trend between the OECD, the ENIGH, the LIS and CONEVAL.

- The LIS data has been recording slightly lower Gini coefficients than the OECD while presenting a consistent spread over the period time.

- Several Gini coefficients are calculated by ENIGH which often differ in levels but not in trend estimates.

Regarding the poverty rates, the LIS and the OECD are presenting very similar trend and rates as both of them are using the same survey, the ENIGH one and the same relative poverty thresholds (50% and 60% of median income, respectively).

To conclude, the OECD reference series and the LIS ones based on the ENIGH survey match well. In addition, the OECD reference series and the ENIGH reference series are presenting very similar trends and the spread between the different figures are usually very narrow.