

# EMPLOYMENT AND THE DISTRIBUTION OF INCOME

Andrés Velasco

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# I. The issues

# Motivation

- My experience as Finance Minister
- Chile: heated discussions on inequality. But...
  - ▣ Focus only on the wage distribution
  - ▣ Discussions on the shape of the wage distribution very ideological: generate more heat than light
  - ▣ Little recognition that wage distribution often changes slowly, along with its fundamental determinants (eg. education)
- Caveat: focus today on distribution of labor income. Government transfer policy can and does have a large impact on inequality, but that is well understood

# Motivation (cont.)

- Can we do better?
  - ▣ One alternative: focus on employment performance
  - ▣ There are large differences in this performance, even among countries of similar per-capita income
  - ▣ Are there “low hanging fruit” here? Time advantage
- Caveat: when thinking about improving employment performance, also need to get away from ideological divides
  - ▣ Right: make labor market flexible and everything will be ok
  - ▣ Left: enhance collective bargaining and everything will be ok

# The issue

- To measure inequality we often use the distribution of per capita household income (*PCHY*)
- If working is a binary choice, for household  $j$

$$PCHY_j = \frac{\sum_{i=1}^M Y_{ij}}{N_j}$$

- $M_j$  = number of people working in household
- $N_j$  = number of members of household
- $Y_{ij}$  = income of person  $i$
- If all working people receive the same income,

$$PCHY_j = \frac{Y_j M_j}{N_j}$$

- Households differ greatly not only in their  $Y_{ij}$ , but in their  $M_j$  and  $N_j$  as well.
- Also in the number of hours they work, not considered here

# Today...

- Focus on the implications of variations in  $M_j$  and  $N_j$  on the distribution of income
- If  $M_j$  and  $N_j$  are unequally distributed and if
  - ▣  $N_j$  varies negatively with  $Y_j$  and
  - ▣  $M_j$  varies positively with  $Y_j$then inequality in  $PCHY$  can be very large indeed
- More a plea for more research than a presentation of a finished research project

# This issue in the literature

- Present, but not central, in the literature on the microdynamics of income distribution
  - ▣ Bourguignon, Ferreira and Lustig (1998)
  - ▣ Bourguignon, Ferreira and Leite (2002)
  - ▣ Székely and Hilgert (2000)
- Largely absent from flagship publications
  - ▣ 2006 WDR: Equity and Development
  - ▣ 1999 IDB: Facing up to Inequality in Latin America
  - ▣ 2004 IDB: Good Jobs Wanted
- Plea: focus on this!

# The road map

- I. The issues
- II. Employment rates and the distribution of employment: cross country evidence
- III. Chile: the distribution of employment and income
- IV. Chile: the distributional impact of changes in employment rates
- V. Low income households with low employment rates: what are they like?
- VI. Tentative policy implications

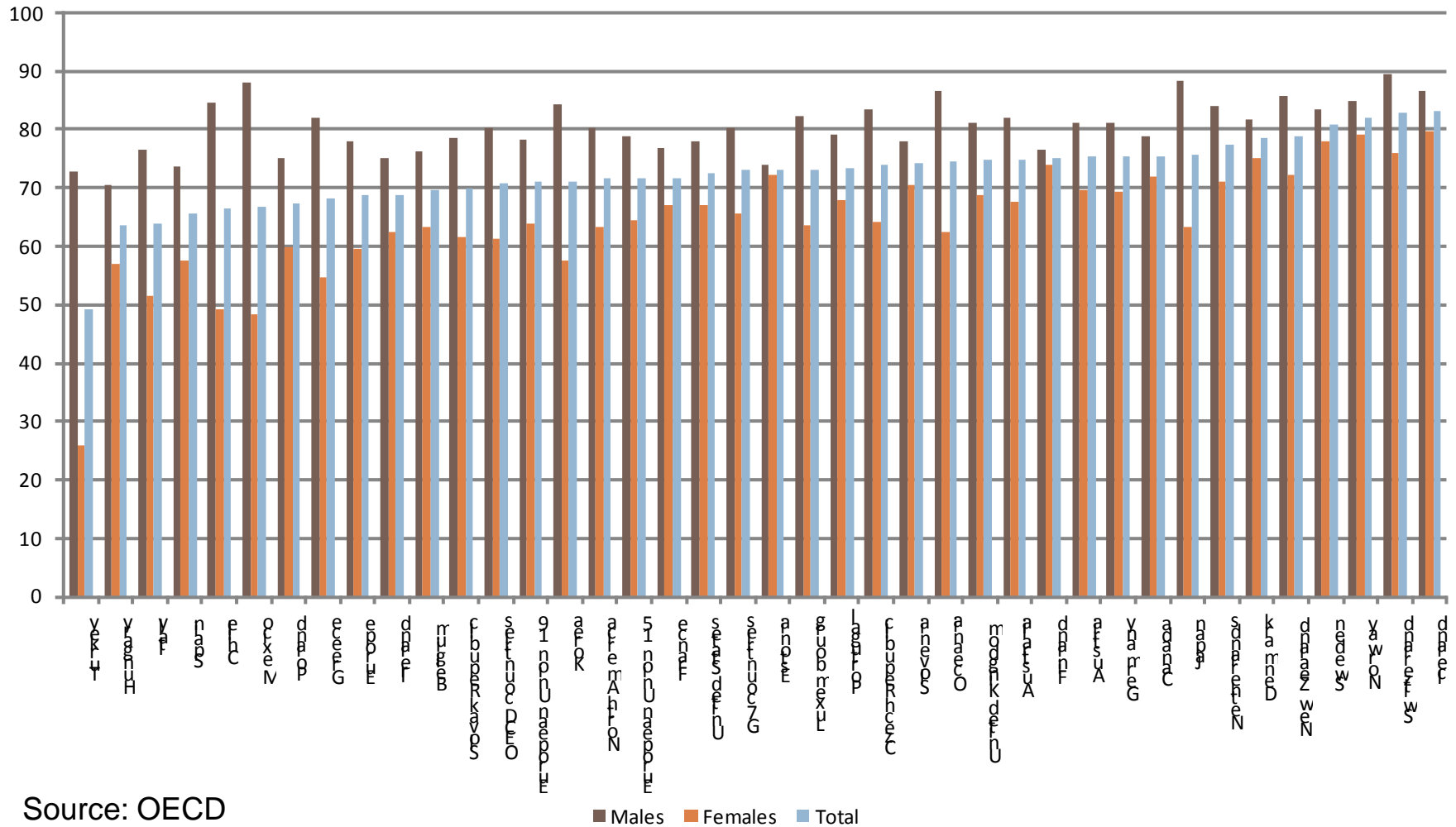




## II. Employment rates and the distribution of employment: cross country evidence

# Employment rates among the (mostly) rich

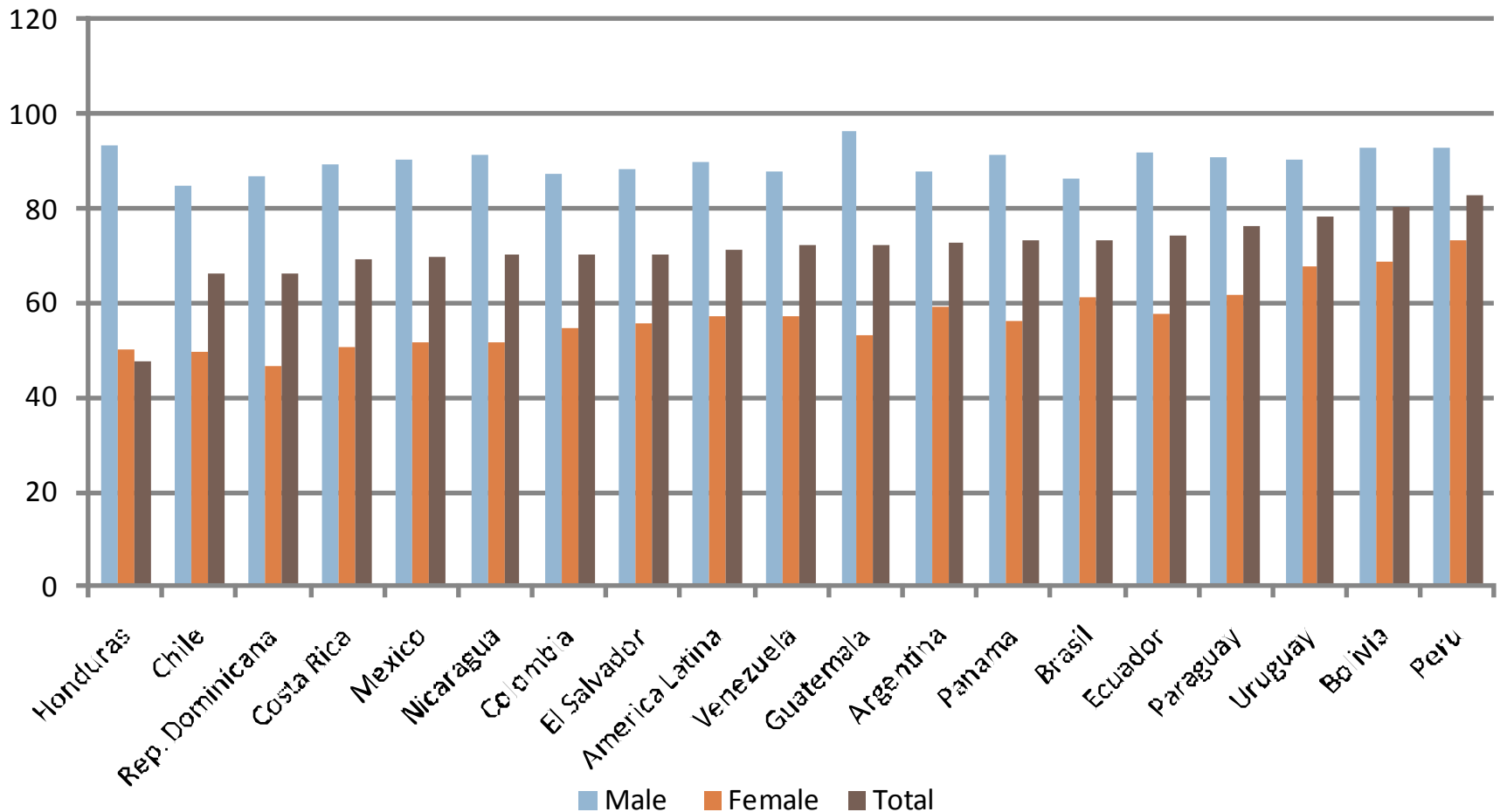
Employment rate (25-64), OECD Countries



Source: OECD

# Employment rates among the not-so rich

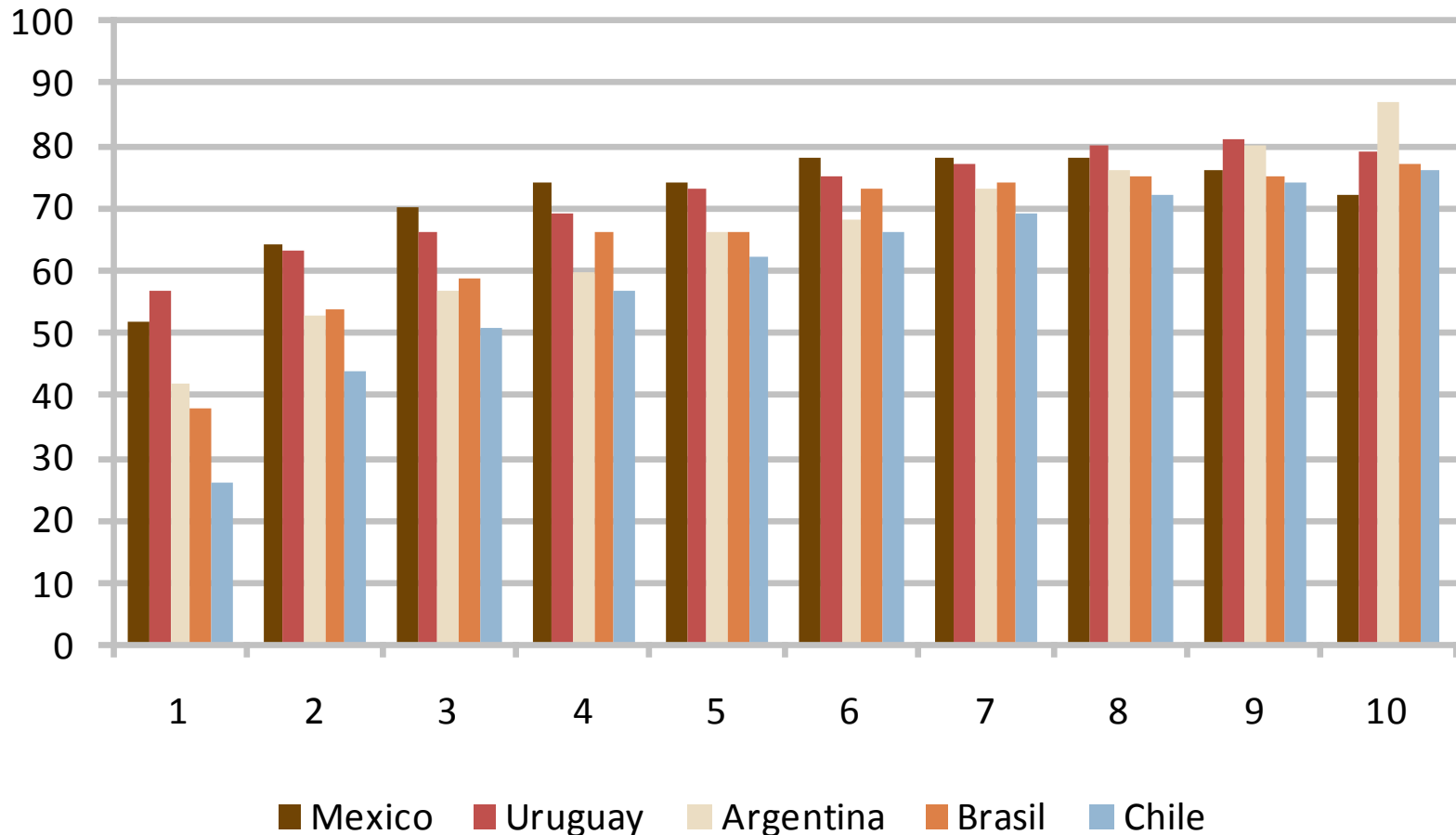
## Employment rate (25-64), Latin America




Source: Own calculations using country's economic surveys

# The unequal distribution of employment

Employment rate by income decile



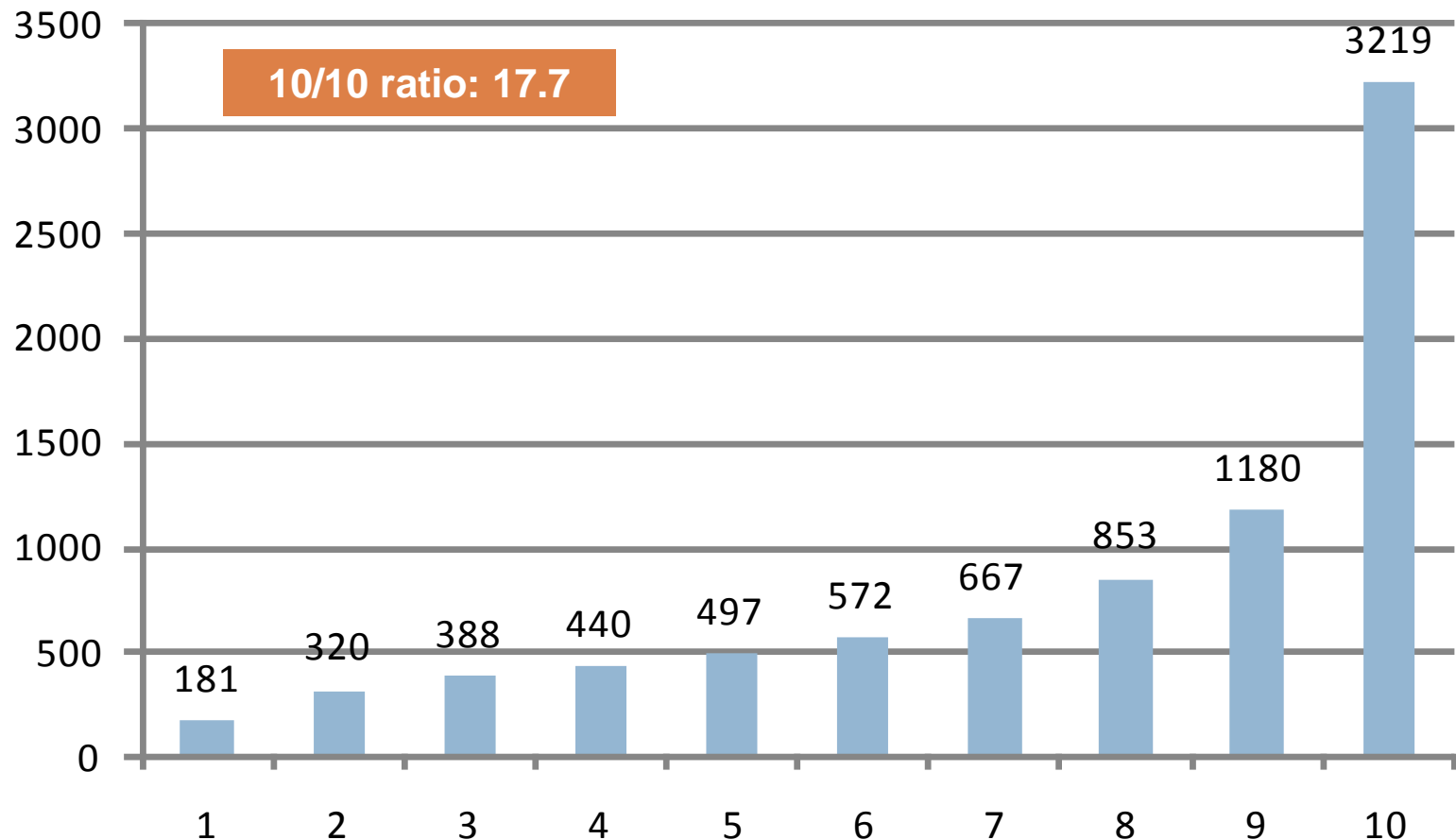
Source: Own calculations using country's economic surveys



# III. Chile: the distribution of employment and income

# Chile: income dist. among those who work

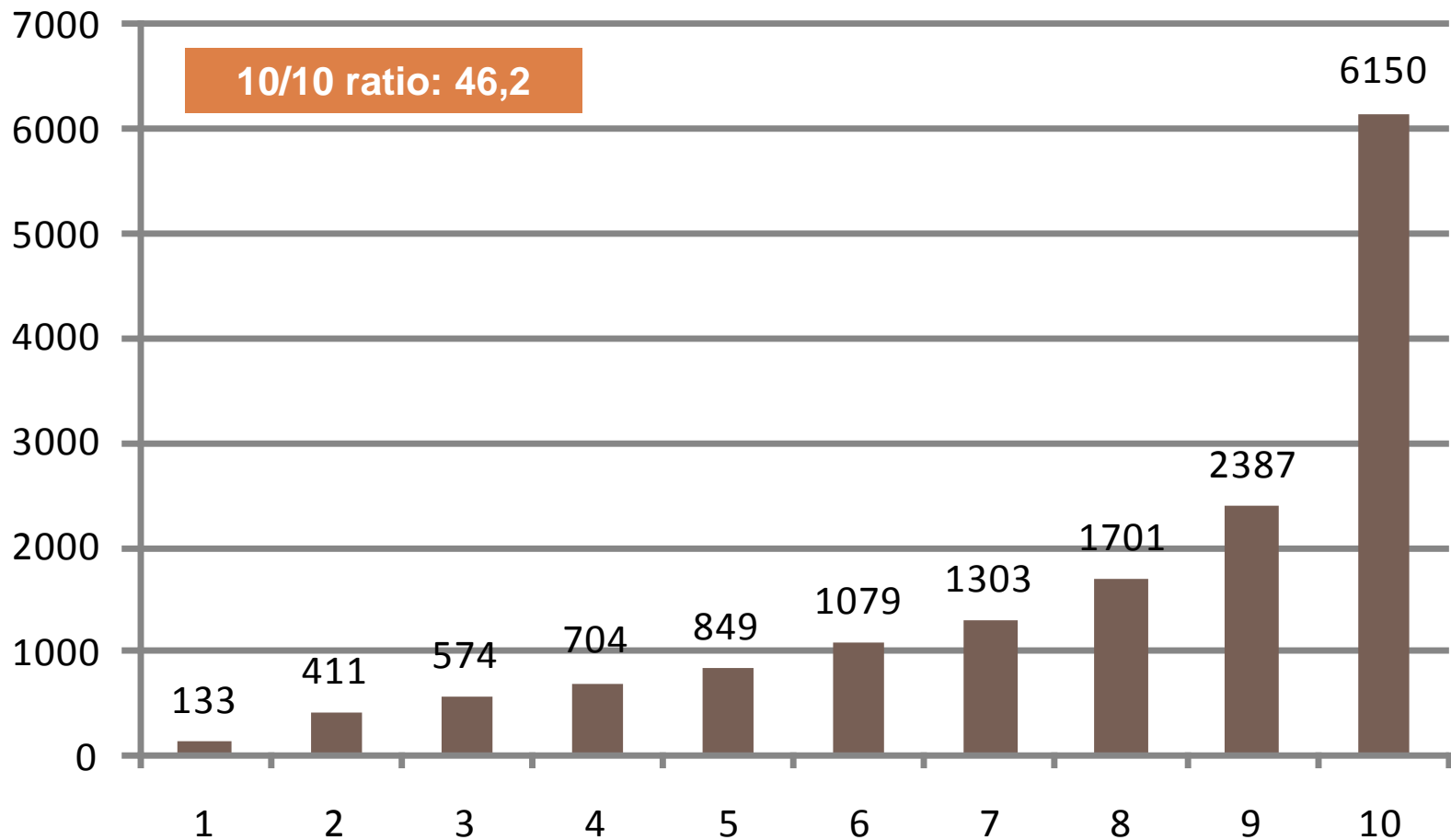
Monthly income those who work (dollars)



Source: Own calculations using CASEN 2009.

# Chile: household income distribution

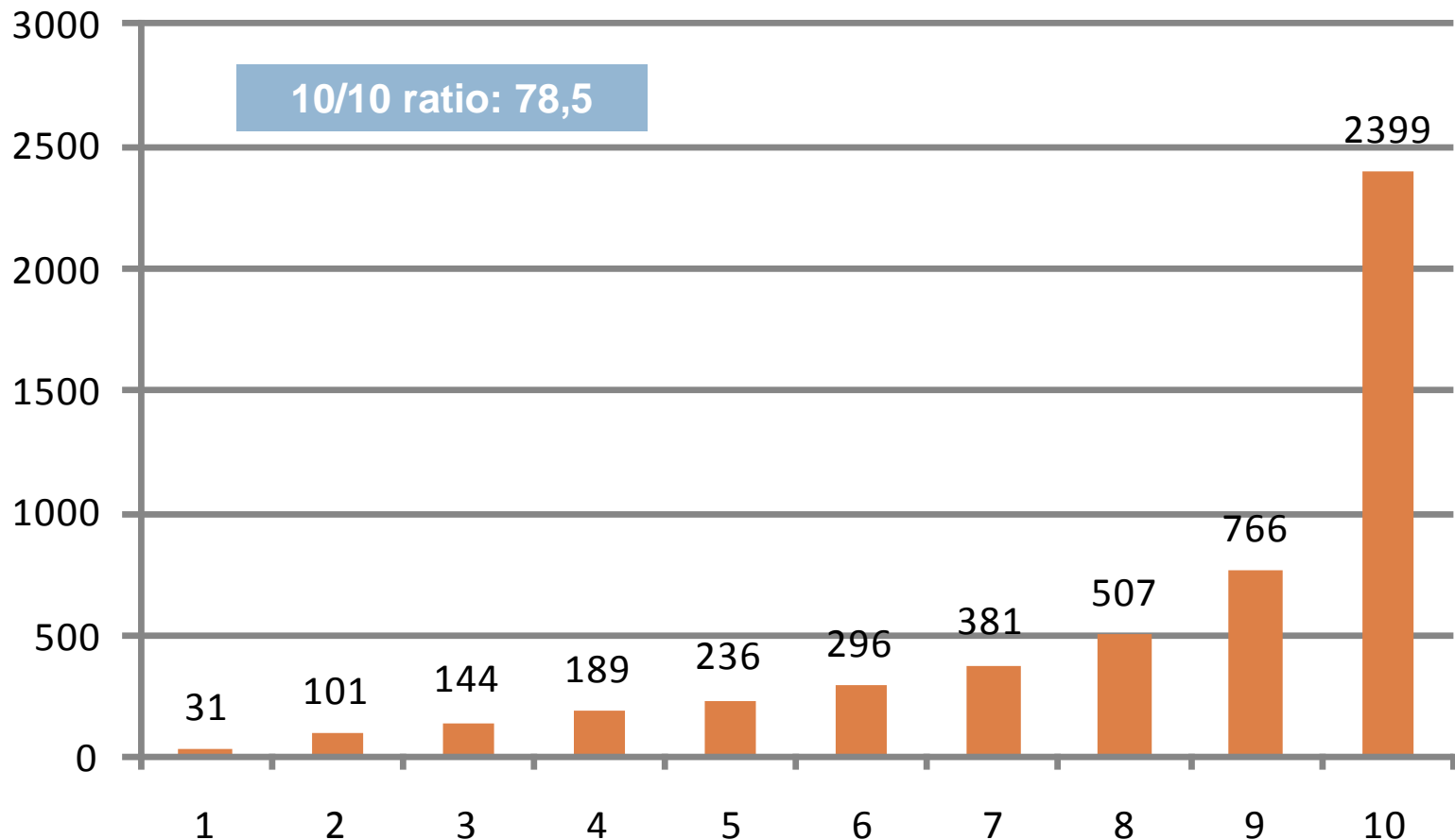
Monthly household income (dollars)



Source: Own calculations using CASEN 2009.

# Chile: per capita household income dist.

Monthly household income per capita (dollars)

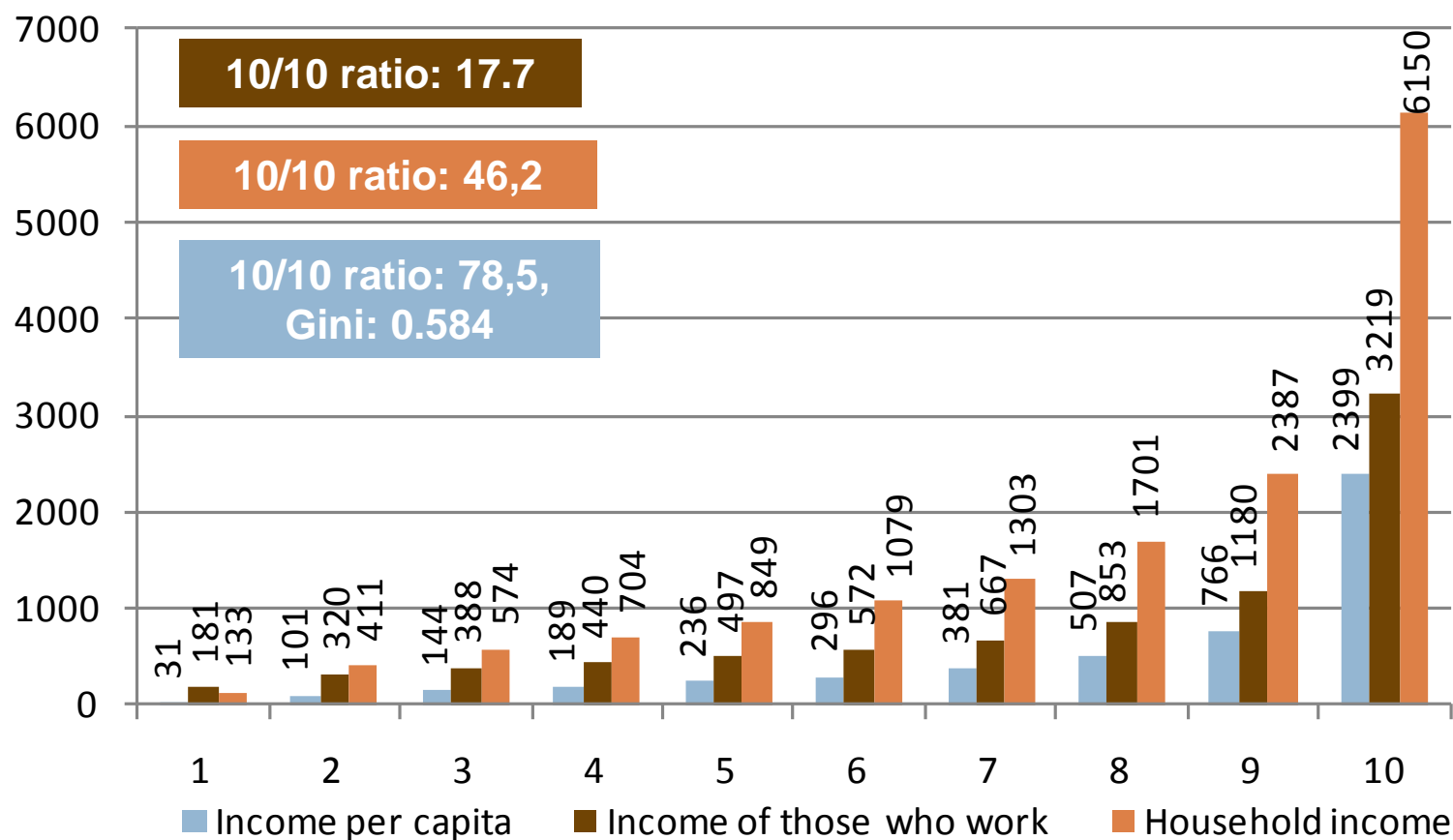


Source: Own calculations using CASEN 2009.



# Chile: a sad distributional story

Monthly income per capita, total household income and income of those who work (US dollars)



Source: Own calculations using CASEN 2009.

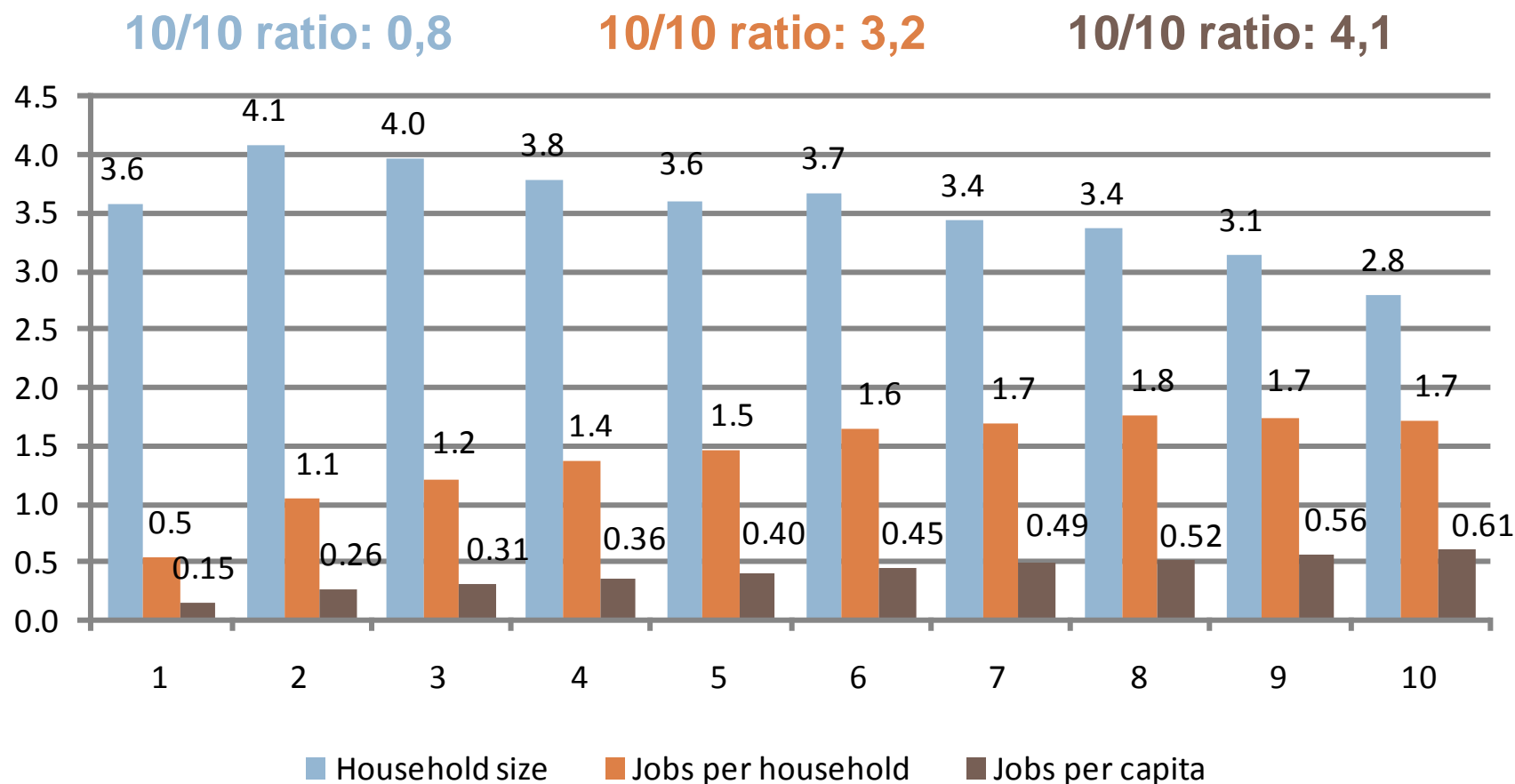
# Message...

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- The number of people who work per household make a big difference
- The number of members of the household make a big difference
- And both are very unevenly distributed across income deciles

# The unequal distribution of jobs

Household size, jobs per household and jobs per capita



Source: Own calculations using CASEN 2009.

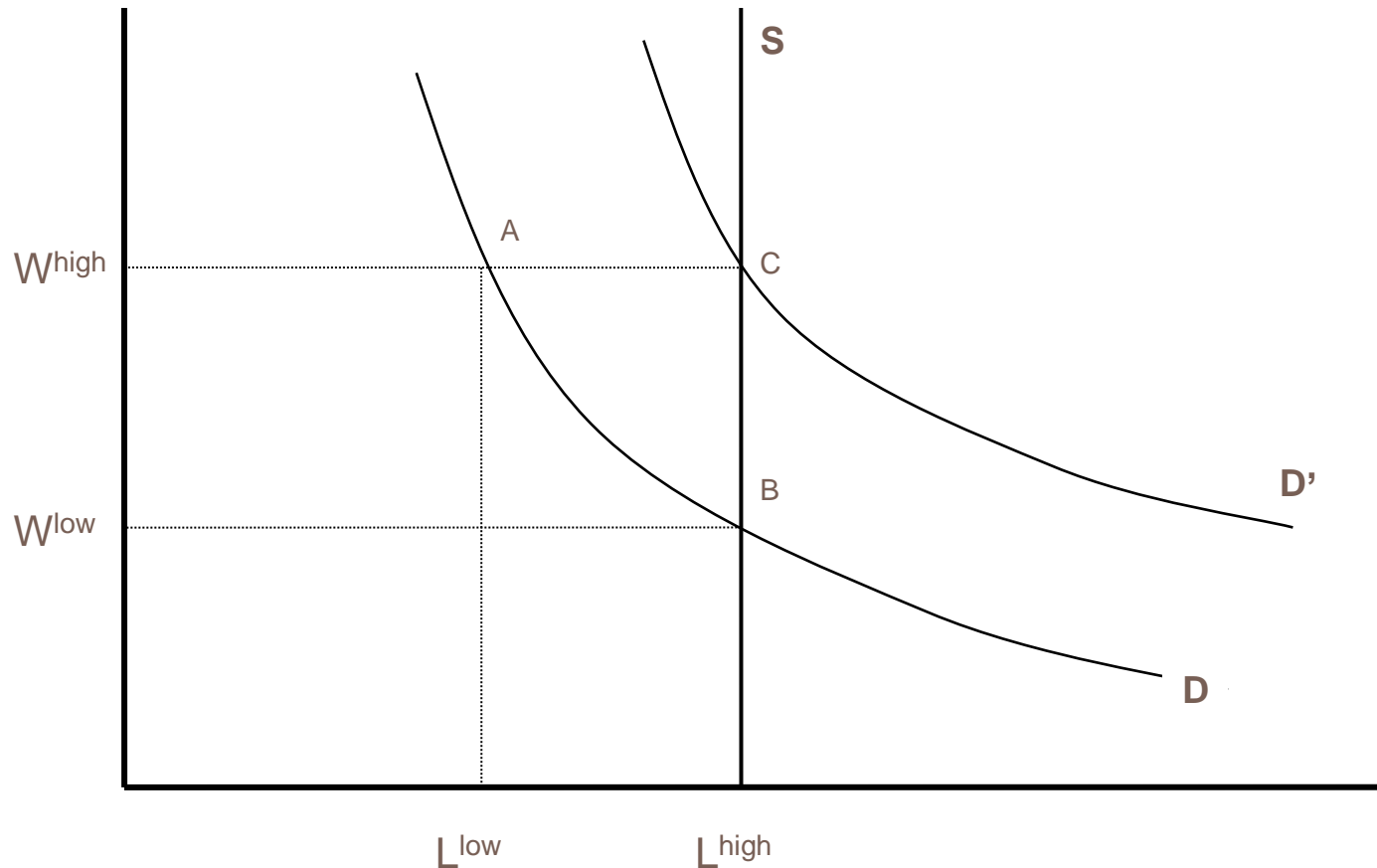


## IV. Chile: the distributional impact of changes in employment rates

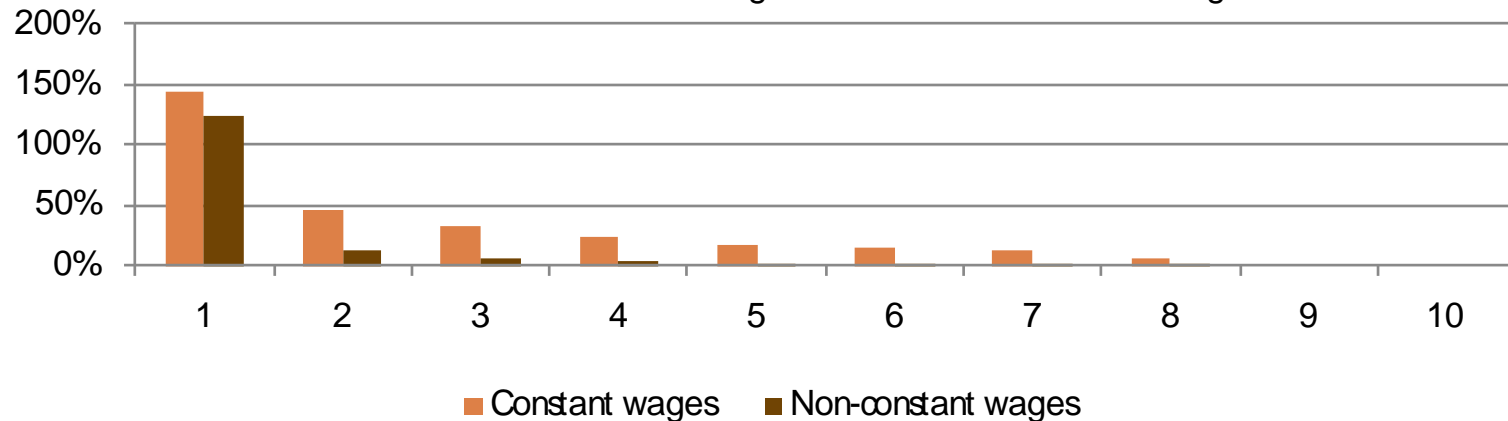
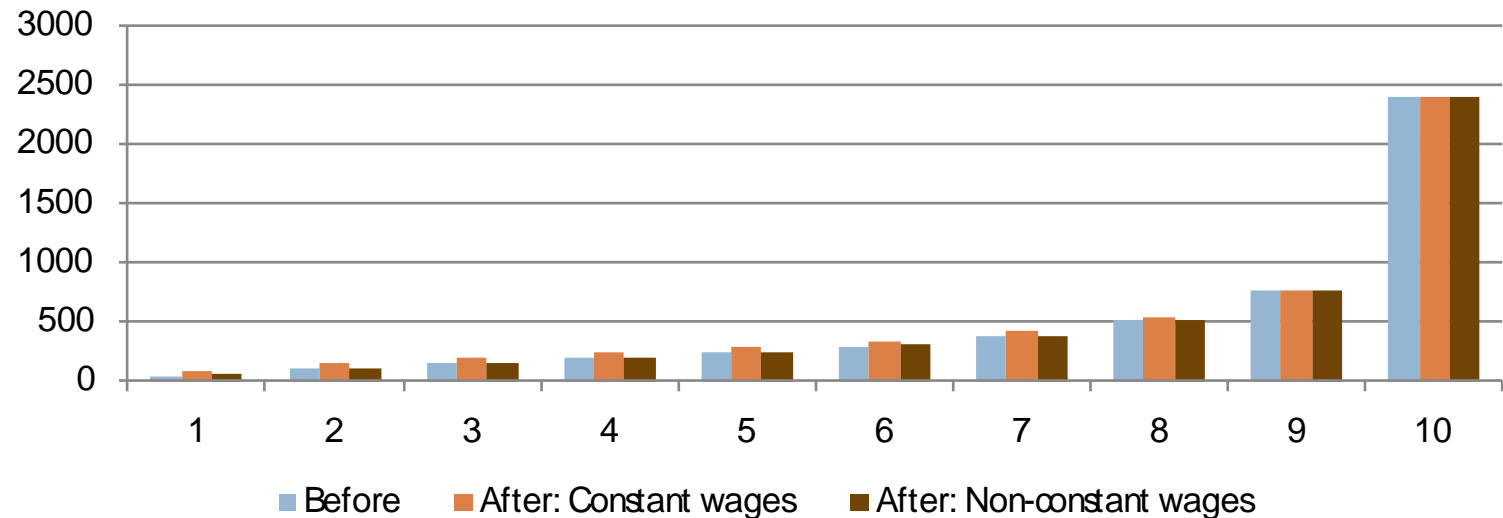
# Simulation 1

- Take all households with a per capita income less than the national average
- Assume that in each of them the number of people (18-64) who work is equal to the national average
- Those who “begin working” make the average of what people already made in that household
- If there was no one working, the entrant makes the average wage for that decile
- Consider two cases: fixed wages (upper bound for effect) and wages that adjust (lower bound)

# Equilibrium in the market for labor



# Simulation 1: Results



10/10 ratio = 78,5 , Gini = 0,584

10/10 ratio = 32.3 , Gini = 0,541

10/10 ratio = 34.9 , Gini = 0,567

# Simulation 2

- Take all households with a per capita income less than the national average
- Assume that in each of them the number of people (18-64) who work is equal to the national average
- In addition, assume that in each of these households all workers work 45 hours a week
- Those who “begin working” make the average hourly wage in that household
- If there was no one working, the entrant makes the average hourly wage for that decile
- Consider two cases: fixed wages (upper bound for effect) and wages that adjust (lower bound)



# Simulation 2: Results



10/10 ratio = 78,5 , Gini = 0,584

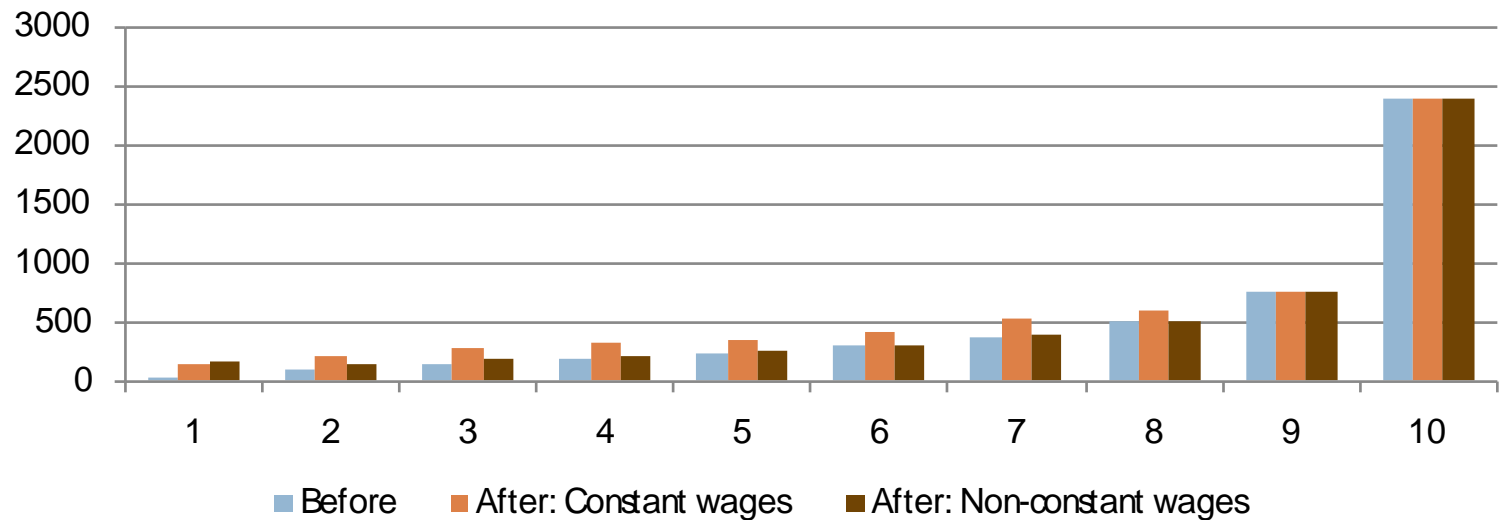
10/10 ratio = 21.5 , Gini = 0,534

10/10 ratio = 17,5 , Gini = 0,547

# Simulation 3

- Take all households with a per capita income less than the national average
- Assume that in each of them the number of people (18-64) who work is equal to the number in decile 10
- In addition, assume that in each of these households all workers work 45 hours a week
- Those who “begin working” make the average hourly wage in that household
- If there was no one working, the entrant makes the average hourly wage for that decile
- Consider two cases: fixed wages (upper bound for effect) and wages that adjust (lower bound)


# Simulation 3: Results



10/10 ratio = 78,5 , Gini = 0,584

10/10 ratio = 17.4 , Gini = 0,512

10/10 ratio = 15,1 , Gini = 0,531



V. Low income  
households  
with low employment  
rates: what are they like?

# Poorer workers work fewer hours

Monthly hours of work (18-65 years)

	Total	Males	Females
1	156	170	134
2	167	176	148
3	168	178	150
4	173	180	160
5	173	181	161
6	175	183	164
7	176	183	166
8	175	180	166
9	175	183	165
10	174	181	165

Source: Own calculations using CASEN 2009.

# Poorer deciles have especially low employment among the young

## Employment rate by age

Decil	18- 24	25- 34	35- 54	55- 65
1	11	25	35	22
2	21	46	56	37
3	32	55	62	41
4	40	65	66	47
5	42	72	71	52
6	48	75	75	54
7	49	77	79	56
8	47	80	80	66
9	41	84	84	71
10	35	85	88	73

Source: Own calculations using CASEN 2009.

# Poor deciles have especially low employment among women

## Female employment rate by age

Decil	18-24	25-34	35-54	55-65
1	8	18	24	15
2	17	29	34	21
3	22	38	41	21
4	30	51	46	28
5	34	58	53	30
6	38	63	58	33
7	43	68	65	36
8	41	72	66	45
9	39	76	71	53
10	29	80	77	51

Source: Own calculations using CASEN 2009.

# Poorer deciles have more self-employed workers, more domestic servants & fewer public employees

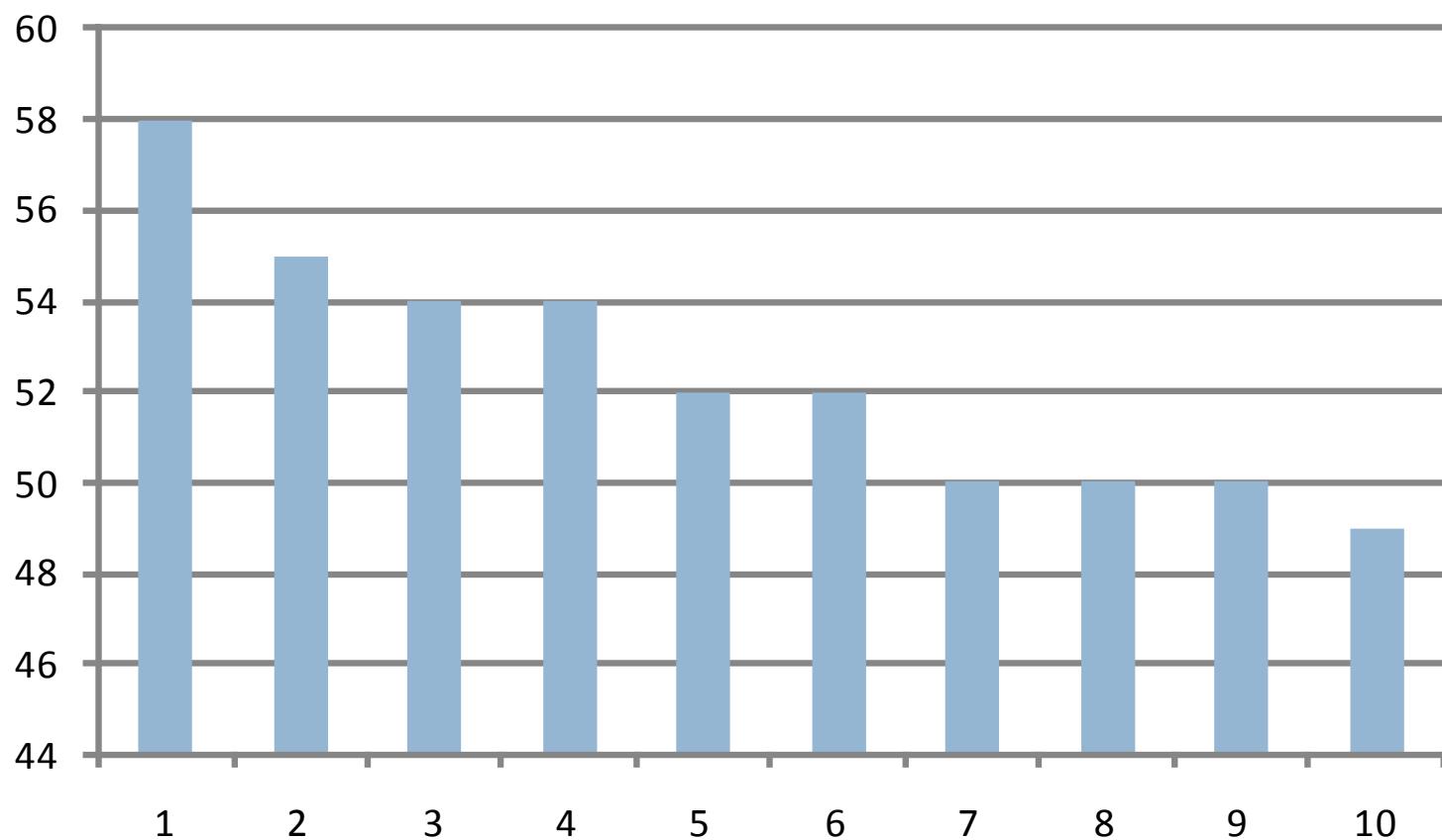
Decil	Employer	Self-employed	Public sector	Private companies	Domestic servants
1	0.5	22.0	7.1	59.3	11.1
2	0.4	14.5	7.4	70.3	7.4
3	0.4	14.0	7.1	70.8	7.7
4	0.7	13.3	8.5	71.1	6.4
5	0.8	17.8	8.1	67.3	5.9
6	1.3	18.0	8.6	66.8	5.4
7	1.9	18.7	10.5	64.2	4.7
8	2.8	20.9	12.7	60.4	3.3
9	3.8	26.1	16.0	52.1	2.0
10	11.6	21.4	18.9	47.7	0.5

Source: Own calculations using CASEN 2009.



# Poorer deciles have more women

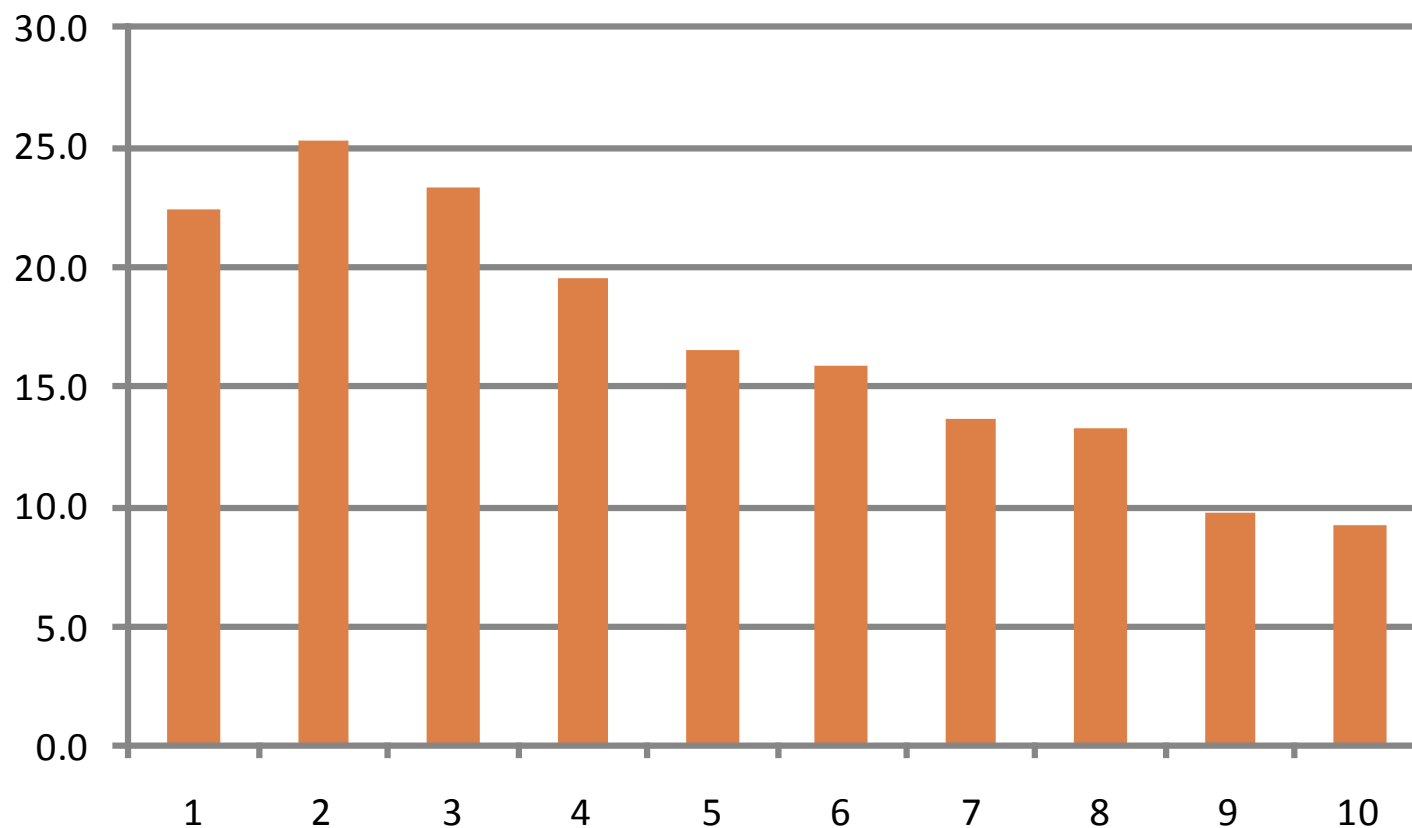
Female among population by decile (%)



Source: Own calculations using CASEN 2009.

# Poorer deciles have more households with children under four

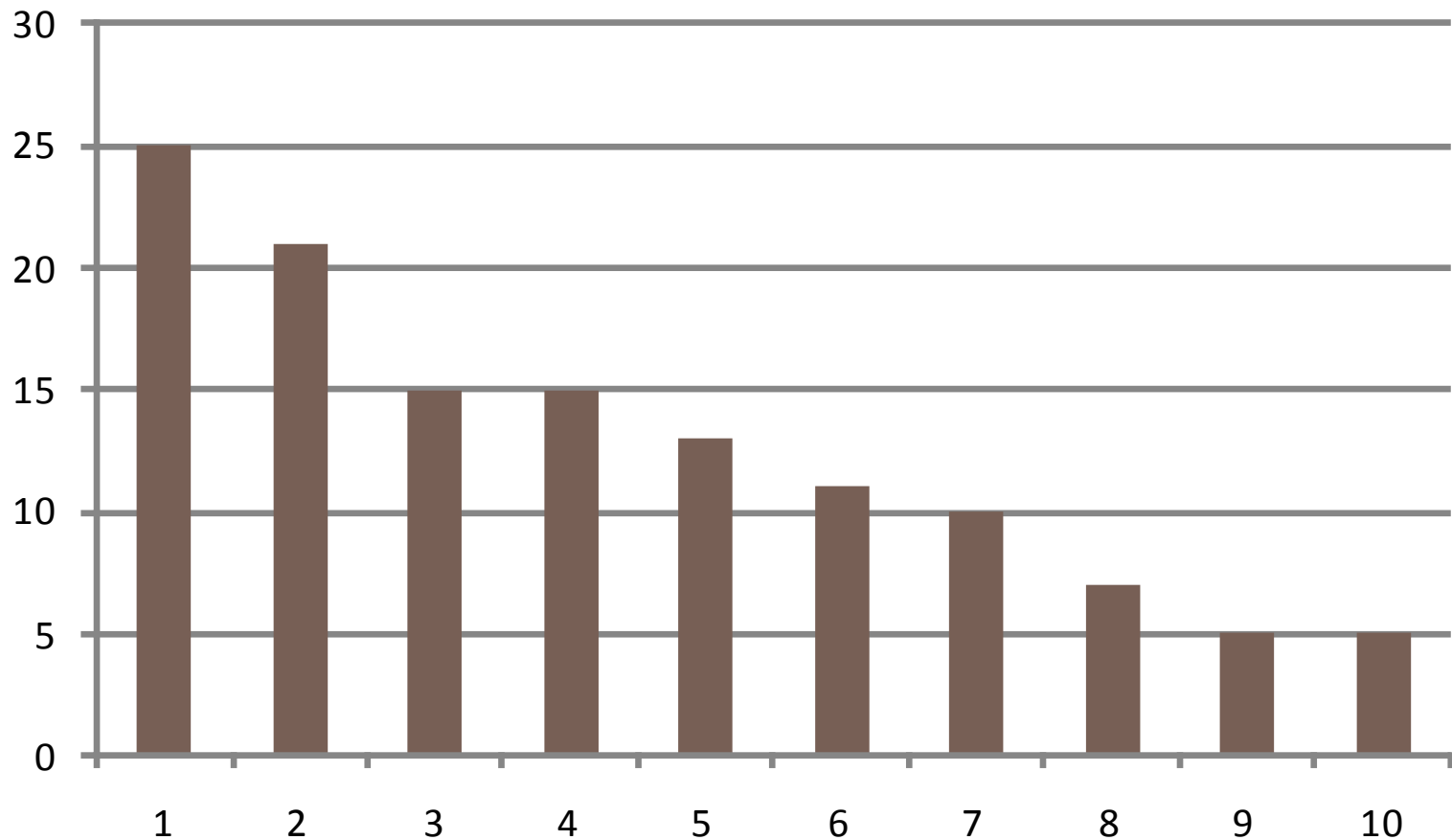
Percentage of households with children younger than 4 years



Source: Own calculations using CASEN 2009.

# Poorer deciles have more rural residents

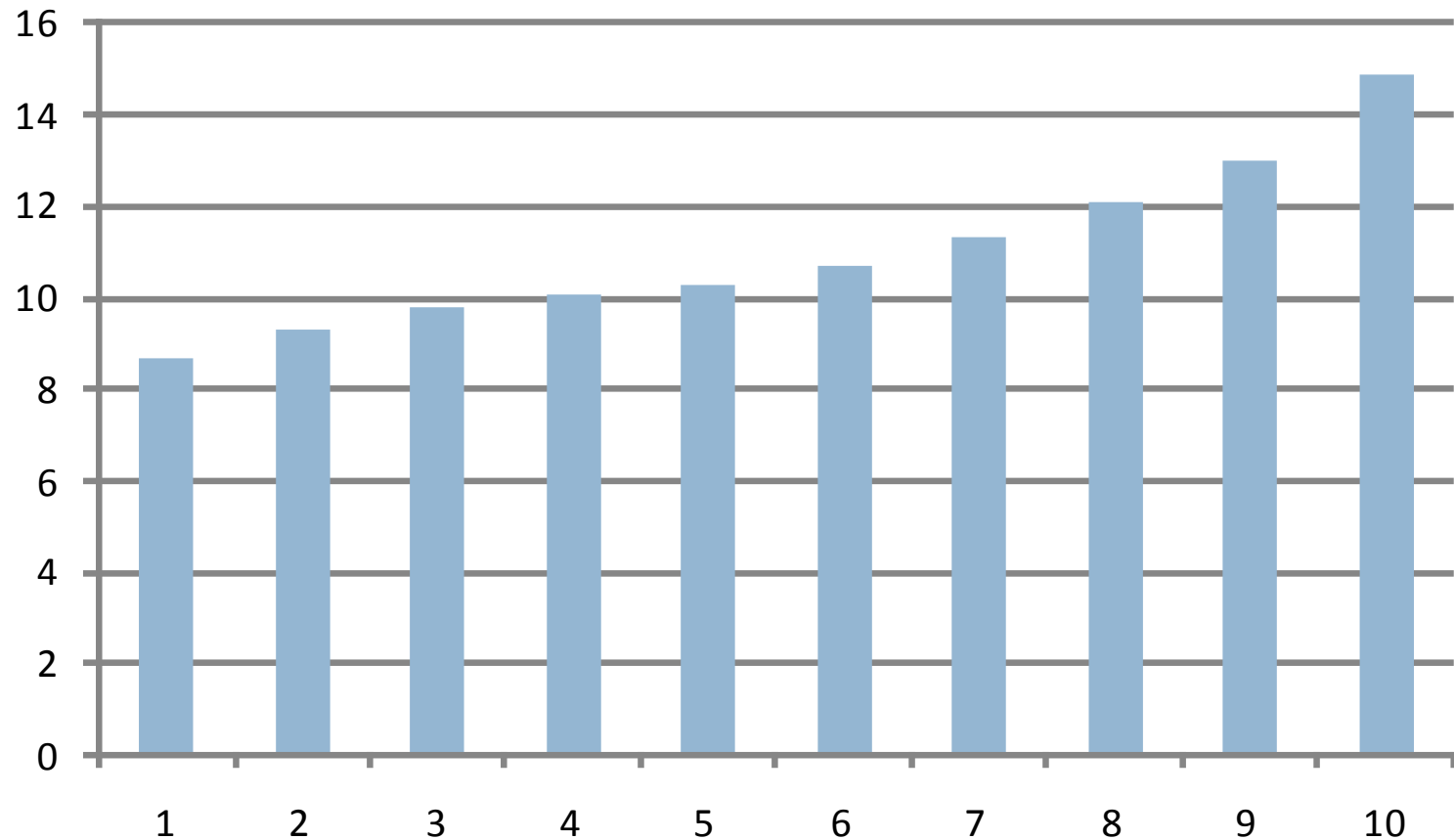
Percentage of households in rural areas (%)



Source: Own calculations using CASEN 2009.

# Poorer deciles have less schooling

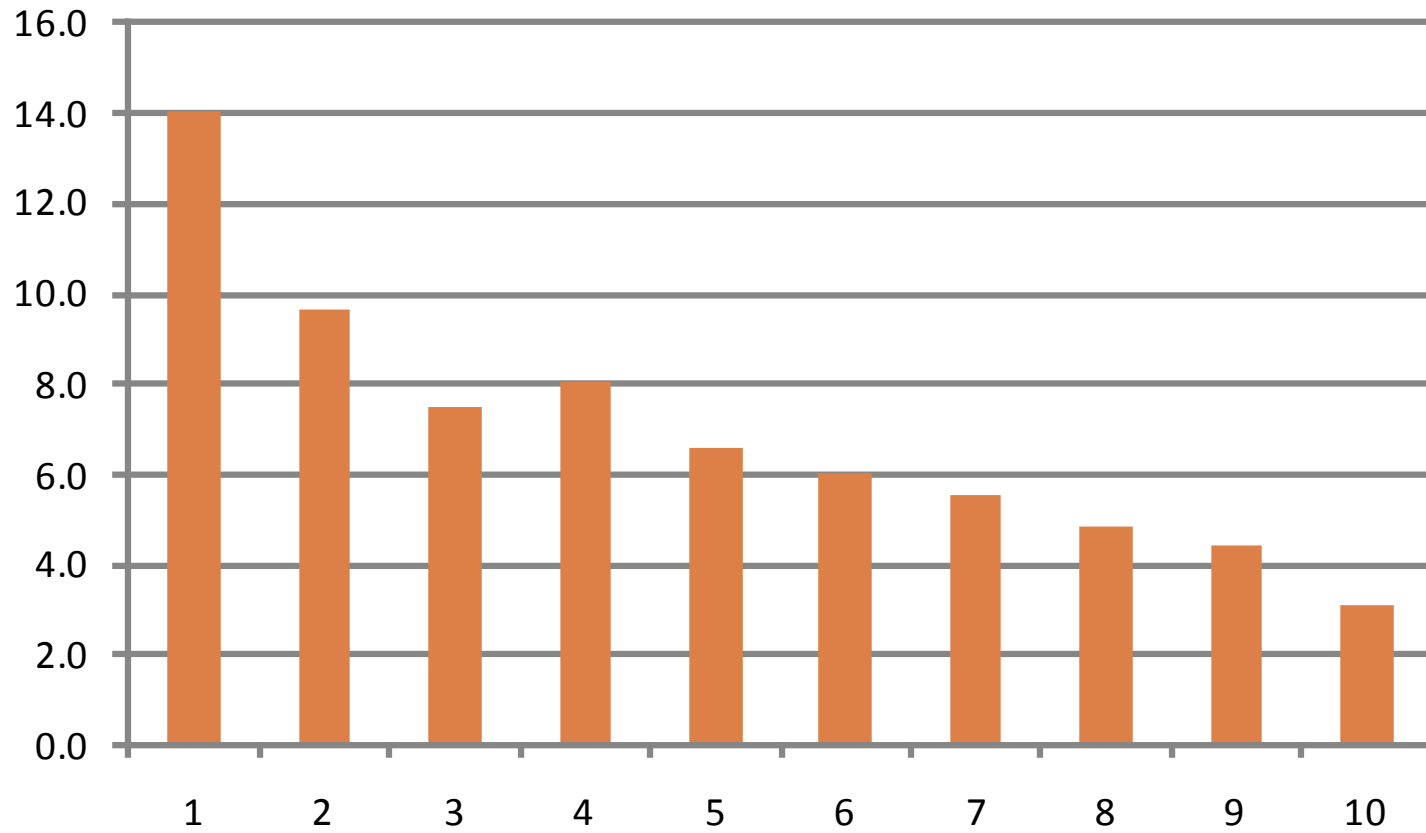
Years of schooling (people age 18-65)



Source: Own calculations using CASEN 2009.

# Poorer deciles have more handicapped people

Percentage of handicapped people



Source: Own calculations using CASEN 2009.



# VI. Tentative policy implications

# What keeps poor people from regular employment?

- Key observation: there is no one factor, and therefore there is no one solution
- You need an approach that does more than simply “make the labor market more flexible.”

# Possible policy priorities

- Supply side
  - Child care
  - Urban, housing and transport policy
  - Employment subsidies (supply side)
- Demand side
  - Flexibility of working hours and shifts
  - Prudence with minimum wages
  - Employment subsidies (demand side)
  - Anti-discrimination legislation with teeth
- Bringing supply and demand together
  - Facilitate information flows
  - Centralize info: “bolsas de trabajo”
- Need more research on the subject!



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