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## **Small Farmers in Developing Countries: Some Results of Household Surveys Data Analysis<sup>1</sup>**

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### **Brief methodological explanation.**

Data was obtained from Living Standards Measurement Surveys. Databases were previously standardized at the World Bank. Calculations consider rural population only.

Seven categories of rural economies were defined, according to the labor activity of the household head:

- Self-employed agriculture (proxy for small farmers)
- Employer agriculture (proxy for land owners)
- Employee agriculture
- Self-employed not agriculture
- Employer not agriculture
- Employee not agriculture
- Not in the labor force

Population estimates of socio-demographic characteristics and some welfare outcomes were obtained for each group at two points in time (beginning of the 90's and 2000's), and the difference for each group in time ( $D_t$ ), the differences respect to the control group at each point in time or gap ( $D_{sea0}$ ,  $D_{sea1}$ ), and the double difference or difference of gaps in time ( $D_{sea1\_D_{sea0}}$ ), were calculated.

Values are expressed as a percent of the value for self-employed in agriculture at first year, except for tables 1 and 2.

The analysis of employment diversification is based on calculating Simpson's diversification indexes for each group, according to the industry where household members work.

## Results

**Table 1a. Proportion of rural households by economic activity of head in African countries (percent).**

Country	Year	Group								
		Self-employed ag	Employers ag	Employees ag	Agriculturally based HH	Self-employed not ag.	Employer not ag.	Employee not ag.	Not agriculturally based HH	Unemployed / Not in the labor force
Burkina Faso	1994	84.69	0.74	1.26	<b>86.69</b>	3.47	0.07	3.16	<b>6.70</b>	6.61
	2002	88.78	0.00	1.37	<b>90.15</b>	4.12	0.00	2.17	<b>6.29</b>	3.56
	D	4.09	-0.74	0.11	<b>3.46</b>	-0.66	-0.07	0.99	<b>0.41</b>	-3.05
Ghana	1991	9.16	0.00	62.64	<b>71.80</b>	11.75	0.00	10.69	<b>22.45</b>	5.76
	1998	61.14	0.00	1.54	<b>62.68</b>	19.26	0.91	13.22	<b>33.39</b>	3.93
	D	51.98	0.00	-61.10	<b>-9.12</b>	-7.51	0.91	-2.52	<b>-10.94</b>	-1.82
Madagascar	1993	15.63	0.00	74.88	<b>90.51</b>	0.85	0.00	4.48	<b>5.33</b>	4.16
	2001	72.13	1.01	4.50	<b>77.63</b>	5.72	1.10	12.15	<b>18.97</b>	3.39
	D	56.50	1.01	-70.38	<b>-12.88</b>	4.87	1.10	7.67	<b>13.64</b>	-0.76
Malawi	1990	47.55	0.41	6.26	<b>54.23</b>	5.21	0.29	11.50	<b>17.00</b>	28.78
	2003	3.07	0.15	1.84	<b>5.06</b>	7.18	0.51	7.36	<b>15.06</b>	79.88
	D	-44.48	-0.26	-4.42	<b>-49.17</b>	1.98	0.23	-4.14	<b>-1.94</b>	51.10
Uganda	1992	71.88	0.14	3.35	<b>75.37</b>	7.29	0.19	10.70	<b>18.18</b>	6.45
	2002	56.85	0.17	5.78	<b>62.81</b>	22.05	0.17	9.24	<b>31.47</b>	5.73
	D	-15.03	0.03	2.43	<b>-12.56</b>	14.76	-0.02	-1.46	<b>13.29</b>	-0.72

\*Indicates difference not statistically significant at 5%

Source: Author's calculations based on household survey data provided by the World Bank.

Some remarks:

- Mixed evidence regarding evolution of the proportion of small farming households.
- Major decrease in proportion of agricultural self employment in Malawi, with considerable increase in non labor households. AIDS?
- Shift towards non agricultural self employment in Uganda.
- Major increase in small farming in Ghana and Madagascar, mostly from employees in agriculture. Maybe a consequence of precarious living conditions of the agricultural labor force.

**Table 1b. Proportion of rural households by economic activity of head in Asian countries (percent).**

Country	Year	Group								
		Self-employed ag	Employers ag	Employees ag	Agriculturally based HH	Self-employed not ag.	Employer not ag.	Employee not ag.	Not agriculturally based HH	Unemployed / Not in the labor force
Cambodia	1997	64.40	0.11	3.92	<b>68.42</b>	10.18	0.31	7.46	<b>17.96</b>	13.62
	2004	51.96	0.13	6.26	<b>58.36</b>	16.30	0.04	14.00	<b>30.34</b>	11.30
	D	-12.44	0.03	2.34	<b>-10.06</b>	6.12	-0.27	6.53	<b>12.38</b>	-2.32
India	1993	37.59	0.00	28.26	<b>65.85</b>	11.76	0.00	13.12	<b>24.88</b>	9.27
	1999	33.54	0.00	27.49	<b>61.03</b>	12.60	0.00	14.16	<b>26.76</b>	12.21
	D	-4.05	0.00	-0.77	<b>-4.82</b>	0.84	0.00	1.04	<b>1.87</b>	2.95
Indonesia	1993	52.81	0.29	9.08	<b>62.18</b>	16.71	0.49	14.10	<b>31.30</b>	6.52
	2002	46.96	2.43	12.73	<b>62.12</b>	14.23	1.27	14.19	<b>29.69</b>	8.18
	D	-5.85	2.15	3.65	<b>-0.05</b>	-2.48	0.79	0.09	<b>-1.61</b>	1.66
Pakistan	1991	88.02	0.12	11.17	<b>99.31</b>	0.12	0.31	0.09	<b>0.52</b>	0.17
	2001	14.05	20.24	9.16	<b>43.45</b>	11.61	0.83	22.97	<b>35.41</b>	21.14
	D	-73.97	20.13	-2.02	<b>-55.86</b>	11.49	0.53	22.87	<b>34.89</b>	20.97
Thailand	1990	21.49	28.28	7.34	<b>57.12</b>	9.25	1.68	18.50	<b>29.43</b>	13.46
	2002	24.80	19.46	9.18	<b>53.44</b>	8.12	1.56	19.04	<b>28.71</b>	17.84
	D	3.31	-8.82	1.83	<b>-3.67</b>	-1.13	-0.12*	0.53*	<b>-0.72</b>	4.39

\*Indicates difference not statistically significant at 5%

Source: Author's calculations based on household survey data provided by the World Bank.

Some remarks:

- Generalized trend of decrease in agriculturally based rural economies.
- Self employment in agriculture decreases in each country, with the exception of Thailand.
- Remarkable case is Pakistan, with a major shift towards self employment and employment out of agriculture.

**Table 1c. Proportion of rural households by economic activity of head in Latin-American countries (percent).**

Country	Year	Group								
		Self-employed ag	Employers ag	Employees ag	Agriculturally based HH	Self-employed not ag.	Employer not ag.	Employee not ag.	Not agriculturally based HH	Unemployed / Not in the labor force
Chile	1990	18.35	2.79	33.66	<b>54.81</b>	5.14	0.46	11.66	<b>17.26</b>	27.93
	2003	19.48	1.74	27.54	<b>48.76</b>	5.70	0.74	12.24	<b>18.67</b>	32.56
	D	1.13	-1.05	-6.13	<b>-6.05</b>	0.56	0.28	0.58	<b>1.41</b>	4.64
Colombia	1995	19.66	5.63	23.78	<b>49.07</b>	16.12	2.03	16.64	<b>34.79</b>	16.14
	2000	24.73	5.42	18.07	<b>48.22</b>	16.72	1.87	14.78	<b>33.37</b>	18.42
	D	5.08	-0.21	-5.71	<b>-0.85</b>	0.60	-0.16	-1.87	<b>-1.42</b>	2.27
Costa Rica	1995	10.44	3.18	18.55	<b>32.17</b>	11.61	3.56	32.05	<b>47.22</b>	20.61
	2001	9.76	4.67	17.04	<b>31.47</b>	12.00	4.65	30.11	<b>46.76</b>	21.92
	D	-0.68	1.49	-1.52	<b>-0.70</b>	0.39	1.09	-1.94	<b>-0.46</b>	1.31
Guatemala	1989	9.42	0.52	6.89	<b>16.83</b>	19.42	3.47	43.75	<b>66.64</b>	16.53
	2002	34.09	5.19	16.71	<b>55.99</b>	9.27	3.88	15.03	<b>28.18</b>	15.84
	D	24.67	4.67	9.82	<b>39.16</b>	-10.16	0.41	-28.71	<b>-38.46</b>	-0.69
Honduras	1995	34.44	1.95	14.23	<b>50.62</b>	14.97	2.25	14.66	<b>31.88</b>	17.50
	2003	40.94	1.29	16.34	<b>58.57</b>	12.29	0.51	11.44	<b>24.24</b>	17.19
	D	6.50	-0.66	2.12	<b>7.96</b>	-2.68	-1.74	-3.21	<b>-7.64</b>	-0.32
México	1994	29.36	5.05	24.36	<b>58.77</b>	8.94	1.05	17.27	<b>27.27</b>	13.96
	2002	26.10	4.10	22.31	<b>52.50</b>	9.82	0.98	20.69	<b>31.49</b>	16.01
	D	-3.27	-0.96	-2.05	<b>-6.27</b>	0.88	-0.07	3.42	<b>4.22</b>	2.05
Nicaragua	1993	36.40	0.13	15.08	<b>51.62</b>	8.57	0.08	14.56	<b>23.21</b>	25.18
	2001	34.17	8.74	16.52	<b>59.43</b>	7.69	1.45	14.35	<b>23.50</b>	17.07
	D	-2.23	8.60	1.44	<b>7.82</b>	-0.88	1.37	-0.21	<b>0.29</b>	-8.11
Paraguay	1995	52.65	0.00	8.73	<b>61.38</b>	13.11	2.21	13.49	<b>28.82</b>	9.80
	2001	43.31	3.64	8.28	<b>55.23</b>	10.81	2.42	16.45	<b>29.68</b>	15.09
	D	-9.35	3.64	-0.44	<b>-6.15</b>	-2.31	0.21	2.96	<b>0.86</b>	5.28
Perú	1994	61.78	0.00	11.62	<b>73.40</b>	10.88	0.00	10.18	<b>21.06</b>	5.54
	2002	53.63	9.10	8.24	<b>70.97</b>	9.23	1.13	12.49	<b>22.86</b>	6.18
	D	-8.15	9.10	-3.38	<b>-2.43</b>	-1.65	1.13	2.32	<b>1.80</b>	0.64

\*Indicates difference not statistically significant at 5%

Source: Author's calculations based on household survey data provided by the World Bank.



Some remarks:

- Mixed evidence regarding increase/decrease in the proportion of small farming households.
- Guatemala and Honduras (likely the poorest countries in this group) show a distinctive pattern of return to the farms. The decrease of non agricultural employment is particularly evident in Guatemala, and it might be explained by changes in the socio-political situation.
- In the rest of the countries, in general there are two patterns. First, an increase in small farming associated to a decrease of employees in agriculture or intra-sector movement (Chile, Colombia). Second, a decrease in small farmers with increase in non agricultural employment or inter-sector movement (Paraguay, Peru, México).



**Table 2a. Socio-demographic changes of small farmers in African countries.**

Country	Year	Female (%)	Average age HH members	HH size (n° members)	Household head age	Prop of HH with female head
Burkina Faso	1994	50.44	20.99	8.34	47.41	5.42
	2002	51.63	20.94	6.91	44.72	5.56
	D	1.19	-0.05	-1.43	-2.70	0.14
Ghana	1991	50.50	21.35	4.45	43.13	38.66
	1998	49.83	22.29	5.16	46.55	22.09
	D	-0.67*	0.93*	0.72*	3.42*	-16.57*
Madagascar	1993	51.89	19.82	4.73	39.58	27.05
	2001	50.91	20.67	4.95	23.95	17.27
	D	-0.98	0.85	0.22	-15.63	-9.79
Malawi	1997	51.03	22.12	4.43	43.07	23.86
	2005	50.07	18.83	4.64	36.52	7.56
	D	-0.96	-3.29	0.21	-6.54	-16.30
Uganda	1992	50.62	20.16	5.05	42.02	24.67
	2002	51.16	18.56	5.58	41.34	25.73
	D	0.54	-1.60	0.53	-0.67	1.06

\*Indicates difference not statistically significant at 5%

Source: Author's calculations based on household survey data provided by the World Bank.

Some remarks:

- Proportion of women is similar to the approximate 1:1 proportion expected nationally, which suggest that there is no strong migratory pattern to the city of women in rural households of small farmers. No major changes in time.
- Reduction of average age in Malawi and Uganda.
- Smaller families (still big) in Burkina Faso.
- Younger household heads, except for Ghana. No explanation yet, to the 24 years old average in Madagascar at 2001.
- Important de-feminization of small farming households (Ghana, Madagascar, Malawi).

**Table 2b. Socio-demographic changes of small farmers in Asian countries.**

Country	Year	Female (%)	Average age HH members	HH size (n° members)	Household head age	Prop of HH with female head
Cambodia	1997	52.17	23.25	4.99	42.07	19.55
	2004	51.60	24.55	5.03	43.58	16.76
	D	-0.58	1.30	0.04	1.51	-2.79
India	1993	47.78	25.62	5.44	45.94	5.15
	1999	47.97	26.40	5.56	46.43	5.13
	D	0.19	0.77	0.12	0.49	-0.02
Indonesia	1993	49.39	26.26	4.44	45.48	8.89
	2002	49.18	28.62	4.04	46.59	8.02
	D	-0.21	2.35	-0.40	1.11	-0.87
Pakistan	1991	47.81	23.07	7.64	48.25	2.45
	2001	49.23	22.22	7.49	44.94	3.21
	D	1.42	-0.86	-0.16	-3.31	0.75
Thailandia	1990	49.98	26.99	4.57	46.10	12.23
	2002	49.91	31.22	3.97	48.76	14.04
	D	-0.07*	4.23	-0.61	2.66	1.81

\*Indicates difference not statistically significant at 5%

Source: Author's calculations based on household survey data provided by the World Bank.

Some remarks.

- Cambodia is the only country exhibiting more women than man in small farmers households.
- Considerable aging in small farming households in Thailand.
- Younger small farming households heads in Pakistan.
- Slight pattern of de-feminization in Cambodia and feminization of small farmers in Thailand.

**Table 2c. Socio-demographic changes of small farmers in Latin-American countries.**

Country	Year	Female (%)	Average age HH member	HH size (n° members)	Household head age	Prop of HH with female head
Chile	1990	47.83	28.91	4.44	48.33	2.31
	2003	46.60	33.20	3.94	51.96	4.90
	D	-1.23	4.29	-0.50	3.63	2.59
Colombia	1995	46.94	27.67	4.93	52.00	8.60
	2000	46.52	27.42	4.80	50.06	6.01
	D	-0.42	-0.25	-0.13	-1.94	-2.59*
Costa Rica	1995	46.53	27.83	4.64	49.03	1.24
	2001	47.83	27.79	4.38	48.44	1.98
	D	1.31*	-0.04	-0.25	-0.59	0.75
Guatemala	1989	49.50	31.74	4.02	46.13	2.35
	2002	50.67	28.39	4.32	45.27	4.44
	D	1.17	-3.36	0.31	-0.86	2.10
Honduras	1995	48.24	21.80	6.15	46.32	2.15
	2003	48.10	23.14	5.79	47.80	4.67
	D	-0.14	1.35	-0.36	1.48*	2.52
México	1994	48.96	26.19	5.38	51.20	8.37
	2002	49.41	29.48	4.67	53.57	10.63
	D	0.45	3.29	-0.70	2.36	2.26
Nicaragua	1993	0.00	0.00	6.06	41.84	3.18
	2001	48.27	21.98	6.26	46.50	6.07
	D	48.27	21.98	0.20	4.66	2.89*
Paraguay	1995	46.68	22.98	5.36	46.83	12.24
	2001	45.82	24.22	5.35	49.05	9.54
	D	-0.85	1.24	-0.01	2.22	-2.69
Perú	1994	49.91	24.35	5.24	47.58	8.79
	2002	49.64	27.75	4.58	48.47	14.22
	D	-0.27	3.40	-0.66	0.88	5.43

\*Indicates difference not statistically significant at 5%

Source: Author's calculations based on household survey data provided by the World Bank.

Some remarks:

- Low proportion of women in small farming families in Chile, Colombia, Costa Rica and Paraguay. It is likely to be a consequence of rural-urban migration of women. All of these countries but Costa Rica showing decrease in women proportion in time.
- Guatemala exhibits an important decrease in average age, opposite to the generality of Latin-American countries considered.
- Older household heads in all countries but Colombia, Costa Rica and Guatemala.
- Evidence of feminization in all countries but Colombia and Paraguay among rural small farming households.

**Table 3a. Relative differences in education and evolution of gaps among rural households in Africa.**

Country	Group	Literacy rate HH members > 15 years					
<b>Ghana</b>		<b>1991</b>	<b>D<sub>sea0</sub></b>	<b>1998</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub> D<sub>sea0</sub></b>
	self-employed agric	100.0		213.8		113.8	
	employers agric						
	employee agric	93.2	-6.8*	286.0	72.2*	192.8	78.9*
	self-employed not agric	140.1	40.1*	285.6	71.8	145.5	31.7*
	employers not agric			417.4	203.6		
	employee not agric	263.1	163.1	480.9	267.1	217.8	104.0
desempleados /nlf	107.9	7.9*	260.4	46.6*	152.5	38.7*	
<b>Madagascar</b>		<b>1993</b>	<b>D<sub>sea0</sub></b>	<b>2001</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub> D<sub>sea0</sub></b>
	self-employed agric	100.0					
	employers agric						
	employee agric	106.5	6.5				
	self-employed not agric	126.2	26.2				
	employers not agric						
	employee not agric	120.2	20.2				
desempleados /nlf	111.8	11.8					
<b>Malawi</b>		<b>1990</b>	<b>D<sub>sea0</sub></b>	<b>2003</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub> D<sub>sea0</sub></b>
	self-employed agric	100.0		752.9		652.9	
	employers agric	0.0	-100.0	852.9	100.0	852.9	200.0
	employee agric	121.4	21.4	827.6	74.8	706.3	53.4
	self-employed not agric	129.3	29.3	991.1	238.3	861.9	209.0
	employers not agric	302.6	202.6	983.9	231.0	681.2	28.3
	employee not agric	156.1	56.1	1065.9	313.0	909.8	256.9
desempleados /nlf	114.8	14.8	840.1	87.3	725.3	72.4	
<b>Uganda</b>		<b>1992</b>	<b>D<sub>sea0</sub></b>	<b>2002</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub> D<sub>sea0</sub></b>
	self-employed agric	100.0		108.1		8.1	
	employer agric	113.7	13.7	144.0	36.0	30.4	22.3
	employee agric	77.0	-23.0	93.0	-15.1	16.0	7.9
	self-employed no agric	129.5	29.5	130.5	22.4	1.0	-7.1
	employer no agric	159.1	59.1	147.0	38.9	-12.1	-20.2
	employee no agric	137.0	37.0	142.7	34.6	5.8	-2.3
unemployed /nlf	81.4	-18.6	91.9	-16.2	10.5	2.4	

**Base 100 self-employed agric at first year: Ghana 13.4%, Madagascar 50,3%, Malawi 6.7%, Uganda 58.6%**

**\*Indicates difference not statistically significant at 5%**

**Source: Author's calculations based on household survey data provided by the World Bank.**

Some remarks:

- Considerable improvement in literacy rates of small farming households in time in all countries, especially the ones with very low initial rates (Ghana, Malawi).
- Small farmers are generally the worst group at the beginning of the 90's, except for Uganda and Ghana, where employees in agriculture have lower rates. At the beginning of the 2000's only the households with head unemployed or not in the labor force are worst in all countries but Uganda.
- Strong evidence of divergence (D<sub>2</sub>) in literacy rates among groups, except for Uganda. Not agriculturally based households are improving their literacy rates faster. In Uganda, small farmers are catching up non agricultural rural households.

**Table 3b. Relative differences in education and evolution of gaps among rural households in Asia.**

Country	Group	Years of education members > 15 years					
<b>Cambodia</b>		<b>1997</b>	<b>D<sub>sea0</sub></b>	<b>2004</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
	self-employed agric	100.0		74.3		-25.7	
	employers agric	111.4	11.4	69.5	-4.8	-41.9	-16.1
	employee agric	96.8	-3.2	64.7	-9.6	-32.2	-6.4
	self-employed not agric	112.5	12.5	90.8	16.5	-21.7	4.0
	employers not agric	139.7	39.7	107.6	33.3	-32.1	-6.4
	employee not agric	129.3	29.3	104.3	30.0	-25.0	0.8
desempleados /nlf	111.6	11.6	71.1	-3.2	-40.5	-14.8	
<b>Indonesia</b>		<b>1993</b>	<b>D<sub>sea0</sub></b>	<b>2002</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
	self-employed agric	100.0		120.3		20.3	
	employers agric	116.1	16.1	131.1	10.8	15.0	-5.3
	employee agric	86.8	-13.2	115.6	-4.7	28.8	8.5
	self-employed not agric	112.3	12.3	137.5	17.2	25.1	4.9
	employers not agric	139.3	39.3	160.4	40.1	21.1	0.8
	employee not agric	154.1	54.1	168.3	48.0	14.2	-6.1
desempleados /nlf	98.9	-1.1	111.2	-9.1	12.2	-8.0	
<b>Pakistan</b>		<b>1991</b>	<b>D<sub>sea0</sub></b>	<b>2001</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
	self-employed agric	100.0		89.6		-10.4	
	employers agric	0.0	-100.0	127.9	38.3	127.9	138.3
	employee agric	61.7	-38.3	64.1	-25.5	2.5	12.9
	self-employed not agric	82.0	-18.0	137.5	47.9	55.5	65.9
	employers not agric	53.4	-46.6	200.4	110.8	147.0	157.4
	employee not agric	126.4	26.4	164.0	74.4	37.6	48.0
desempleados /nlf	128.5	28.5	155.0	65.4	26.5	36.9	
<b>Thailand</b>		<b>1990</b>	<b>D<sub>sea0</sub></b>	<b>2002</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
	self-employed agric	100.0		120.9		20.9	
	employers agric	104.8	4.8	123.4	2.5	18.5	-2.4
	employee agric	93.1	-6.9	107.9	-13.0	14.8	-6.1
	self-employed not agric	120.0	20.0	147.0	26.1	26.9	6.0
	employers not agric	134.7	34.7	166.9	46.0	32.2	11.3
	employee not agric	143.8	43.8	171.6	50.7	27.8	6.9
desempleados /nlf	100.4	0.4*	117.8	-3.1	17.4	-3.5	

**Base 100 self-employed agric at first year: Cambodia 4.78, Indonesia 4.62, Pakistan 2.08, Thailand 4.46**

**\*Indicates difference not statistically significant at 5%**

**Source: Author's calculations based on household survey data provided by the World Bank.**

Some remarks:

- Small farming households have improved their educational status except for Pakistan and Cambodia (outstanding generalized decrease).
- Only employees in agriculture are less educated than small farmers in all countries but Pakistan and Cambodia at 2004.
- Mixed evidence on educational convergence/divergence in Indonesia and Thailand. Clear divergence in Pakistan. Negative divergence of small farmers respect to employers and employees out of agriculture in Thailand (i.e. small farmers have worsen their educational status faster).

**Table 3c. Relative differences in education and evolution of gaps among rural households in Latin America.**

Country	Group	Years of education members > 15 years					$D_{sea1} - D_{sea0}$
		1990	$D_{sea0}$	2003	$D_{sea1}$	$D_t$	
<b>Chile</b>	self-employed agric	100.0		109.7		9.7	
	employers agric	143.6	43.6	152.0	42.2	8.3	-1.4
	employee agric	97.1	-2.9	119.4	9.6	22.3	12.6
	self-employed not agric	116.3	16.3	135.8	26.0	19.5	9.7
	employers not agric	180.6	80.6	190.5	80.8	10.0	0.2*
	employee not agric	142.0	42.0	150.8	41.0	8.8	-0.9
	desempleados /nlf	86.4	-13.6	95.3	-14.4	8.9	-0.9
<b>Colombia</b>	self-employed agric	100.0		110.7		10.7	
	employers agric	116.8	16.8	122.5	11.8	5.7	-5.0
	employee agric	98.5	-1.5	108.6	-2.1	10.2	-0.5
	self-employed not agric	150.0	50.0	165.3	54.6	15.3	4.6
	employers not agric	176.1	76.1	200.5	89.8	24.4	13.7
	employee not agric	176.3	76.3	218.9	108.2	42.6	31.9
	desempleados /nlf	118.4	18.4	129.8	19.1	11.4	0.7
<b>Costa Rica</b>	self-employed agric	100.0		98.0		-2.0	
	employers agric	117.1	17.1	119.1	21.1	2.1	4.1
	employee agric	96.3	-3.7	93.8	-4.2	-2.4	-0.4*
	self-employed not agric	124.7	24.7	123.8	25.8	-0.9	1.1
	employers not agric	150.0	50.0	153.5	55.5	3.4	5.4
	employee not agric	135.8	35.8	137.2	39.2	1.5	3.5
	desempleados /nlf	96.1	-3.9	92.2	-5.8	-3.9	-1.9
<b>Guatemala</b>	self-employed agric	100.0		61.8		-38.2	
	employers agric	360.1	260.1	100.1	38.3	-260.0	-221.8
	employee agric	110.8	10.8	76.0	14.2	-34.8	3.3
	self-employed not agric	205.7	105.7	111.5	49.7	-94.2	-56.1
	employers not agric	280.4	180.4	173.8	112.0	-106.5	-68.3
	employee not agric	237.8	137.8	159.5	97.7	-78.3	-40.1
	desempleados /nlf	224.6	124.6	41.8	-20.0	-182.8	-144.6
<b>Honduras</b>	self-employed agric	100.0		139.7		39.7	
	employers agric	175.0	75.0	192.3	52.6	17.3	-22.4
	employee agric	98.1	-1.9	138.5	-1.2	40.4	0.7
	self-employed not agric	134.8	34.8	166.9	27.2	32.0	-7.7
	employers not agric	189.6	89.6	214.8	75.1	25.2	-14.5
	employee not agric	176.0	76.0	188.2	48.5	12.2	-27.5
	desempleados /nlf	116.2	16.2	155.8	16.1	39.6	-0.1*

**Table 3c (cont). Relative differences in education and evolution of gaps among rural households in Latin America.**

Country	Group	Years of education members > 15 years					
		1994	D <sub>sea0</sub>	2002	D <sub>sea1</sub>	D <sub>t</sub>	D <sub>sea1</sub> -D <sub>sea0</sub>
Mexico	self-employed agric	100.0		114.9		14.9	
	employers agric	132.3	32.3	135.6	20.7	3.3	-11.6
	employee agric	99.7	-0.3	127.6	12.8	28.0	13.1
	self-employed not agric	128.8	28.8	153.6	38.8	24.9	10.0
	employers not agric	199.9	99.9	182.3	67.4	-17.6	-32.4
	employee not agric	154.3	54.3	201.3	86.5	47.0	32.2
	desempleados /nlf	101.6	1.6	119.7	4.8	18.1	3.2
Nicaragua	self-employed agric	100.0		130.3		30.3	
	employer agric	131.5	31.5	192.3	61.9	60.7	30.4
	employee agric	107.3	7.3	118.7	-11.6	11.4	-18.9
	self-employed no agric	184.7	84.7	205.9	75.6	21.3	-9.1
	employer no agric	515.5	415.5	253.2	122.8	-262.4	-292.7
	employee no agric	201.9	101.9	238.6	108.3	36.7	6.4
	unemployed /nlf	86.6	-13.4	143.5	13.1	56.9	26.6
Paraguay	self-employed agric	100.0		108.8		8.8	
	employers agric			130.4	21.6		
	employee agric	98.6	-1.4	96.1	-12.7	-2.5	-11.3
	self-employed not agric	124.2	24.2	142.1	33.3	17.9	9.1
	employers not agric	148.2	48.2	163.1	54.3	14.9	6.1
	employee not agric	142.3	42.3	161.4	52.6	19.1	10.4
	desempleados /nlf	93.3	-6.7	112.5	3.7	19.2	10.4
Peru	self-employed agric	100.0		74.6		-25.4	
	employers agric			86.8	12.2		
	employee agric	91.2	-8.8	87.3	12.6	-3.9	21.5
	self-employed not agric	111.9	11.9	109.9	35.3	-2.0	23.3
	employers not agric			133.2	58.5		
	employee not agric	122.5	22.5	136.2	61.6	13.7	39.1
	desempleados /nlf	104.0	4.0	93.0	18.3	-11.1	14.3

**Base 100 self-employed agric in first year: Chile 6.14, Colombia 3.68, Costa Rica 5.89, Guatemala 2.67, Honduras 3.30**

**Mexico 3.41, Nicaragua 2.08, Paraguay 4.32, Peru 6.63. \*Indicates difference not statistically significant at 5%**

**Source: Author's calculations based on household survey data provided by the World Bank.**

Some remarks:

- Increase in educational level of households with head self employed in agriculture in time. Remarkable counterexamples are Guatemala and Peru.
- In general, only employees in agriculture (and unemployed or not in the labor force in some countries) have lower educational levels than small farmers at first period.
- Educational divergence in Honduras, Paraguay and Peru. Guatemala is an interesting example of negative convergence, where small farmers have decreased their educational status slower than the other groups.
- There is some reversal in educational status, with small farmers initially better and finally worst than employees in agriculture in countries like Chile, Mexico and Peru.

**Table 4a. Relative differences in unemployment among rural households in African.**

Country	Group	Unemployment HH members 15 to 65 years old					
<b>Burkina Faso</b>		<b>1994</b>	<b>D<sub>sea0</sub></b>	<b>2002</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>_D<sub>sea0</sub></b>
	self-employed agric	100.0		3143.8		3043.8	
	employers agric	4239.4	4139.4				
	employee agric	0.0	-100.0	6873.6	3729.8	6873.6	3829.8
	self-employed not agric	0.0	-100.0	35831.8	32688.0	35831.8	32788.0
	employers not agric	0.0	-100.0				
	employee not agric	10369.2	10269.2	25768.2	22624.4	15399.0	12355.2
desempleados /nlf	2195.6	2095.6	89810.5	86666.7	87614.9	84571.1	
<b>Ghana</b>		<b>1991</b>	<b>D<sub>sea0</sub></b>	<b>1998</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>_D<sub>sea0</sub></b>
	self-employed agric	100.0		185.3		85.3*	
	employers agric						
	employee agric	62.6	-37.4*	0.0	-185.3	-62.6	-147.8
	self-employed not agric	141.0	41.0*	728.8	543.5	587.8	502.5
	employers not agric			358.8	173.6*		
	employee not agric	101.2	1.2*	375.8	190.5	274.6	189.3
desempleados /nlf	2807.8	2707.8	966.5	781.3	-1841.2	-1926.5	
<b>Madagascar</b>		<b>1993</b>	<b>D<sub>sea0</sub></b>	<b>2001</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>_D<sub>sea0</sub></b>
	self-employed agric	100.0		230.5		130.5	
	employers agric			0.0	-230.5		
	employee agric	56.6	-43.4	0.0	-230.5	-56.6	-187.2
	self-employed not agric	529.3	429.3	260.7	30.2	-268.6	-399.1
	employers not agric			0.0	-230.5		
	employee not agric	491.9	391.9	292.4	61.9	-199.5	-330.0
desempleados /nlf	7128.4	7028.4	2500.8	2270.2	-4627.7	-4758.2	
<b>Malawi</b>		<b>1990</b>	<b>D<sub>sea0</sub></b>	<b>2003</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>_D<sub>sea0</sub></b>
	self-employed agric	100.0		0.0		-100.0	
	employers agric	643.6	543.6	0.0	0.0	-643.6	-543.6
	employee agric	351.0	251.0	0.0	0.0	-351.0	-251.0
	self-employed not agric	128.1	28.1	88.9	88.9	-39.2	60.8
	employers not agric	1123.1	1023.1	382.3	382.3	-740.8	-640.8
	employee not agric	396.3	296.3	268.0	268.0	-128.3	-28.3
desempleados /nlf	940.5	840.5	124.8	124.8	-815.6	-715.6	
<b>Uganda</b>		<b>1992</b>	<b>D<sub>sea0</sub></b>	<b>2002</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>_D<sub>sea0</sub></b>
	self-employed agric	100.0		3.9		-96.1	
	employer agric	108.6	8.6	11.1	7.2	-97.5	-1.4*
	employee agric	130.9	30.9	11.4	7.5	-119.5	-23.4
	self-employed no agric	138.8	38.8	5.0	1.1	-133.8	-37.7
	employer no agric	79.6	-20.4	24.2	20.3	-55.4	40.7
	employee no agric	116.4	16.4	15.0	11.1	-101.3	-5.2
unemployed /nlf	308.6	208.6	65.7	61.8	-242.9	-146.8	

Base 100 self-employed agric at first year: Burkina Faso 0.006%, Ghana 1.10%, Madagascar 0.39%, Malawi 0.30%, Uganda 11.66%. \*Indicates difference not statistically significant at 5%

Source: Author's calculations based on household survey data provided by the World Bank.

Some remarks:

- Very low unemployment rates in African small farming households.
- Small farmers tend to have the lower unemployment rates in Malawi and Uganda.
- Not much to say regarding unemployment dynamics, having data for only two years.

**Table 4b. Relative differences in unemployment among rural households in Asia.**

Country	Group	Unemployment HH members 15 to 65 years old					
<b>Cambodia</b>		<b>1997</b>	<b>D<sub>sea0</sub></b>	<b>2004</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
	self-employed agric	100.0		428.3		328.3	
	employers agric	0.0	-100.0	0.0	-428.3	0.0	-328.3
	employee agric	0.0	-100.0	375.7	-52.6	375.7	47.4
	self-employed not agric	1821.9	1721.9	1394.7	966.5	-427.2	-755.5
	employers not agric	0.0	-100.0	0.0	-428.3	0.0	-328.3
	employee not agric	481.3	381.3	2023.3	1595.0	1542.0	1213.7
desempleados /nlf	11639.4	11539.4	6791.0	6362.7	-4848.4	-5176.7	
<b>India</b>		<b>1993</b>	<b>D<sub>sea0</sub></b>	<b>1999</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
	self-employed agric	100.0		83.5		-16.5	
	employers agric						
	employee agric	56.7	-43.3	79.0	-4.5	22.3	38.8
	self-employed not agric	123.3	23.3	126.4	43.0	3.2*	19.7
	employers not agric						
	employee not agric	180.1	80.1	203.3	119.8	23.3	39.8
desempleados /nlf	289.6	189.6	279.9	196.4	-9.8	6.7	
<b>Indonesia</b>		<b>1993</b>	<b>D<sub>sea0</sub></b>	<b>2002</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
	self-employed agric	100.0		149.2		49.2	
	employers agric	134.7	34.7	264.4	115.2	129.7	80.5
	employee agric	115.3	15.3	202.3	53.1	87.1	37.9
	self-employed not agric	139.6	39.6	204.3	55.1	64.7	15.5
	employers not agric	169.3	69.3	132.1	-17.1	-37.1	-86.3
	employee not agric	173.4	73.4	208.5	59.3	35.2	-14.0
desempleados /nlf	303.0	203.0	411.6	262.4	108.5	59.3	
<b>Pakistan</b>		<b>1991</b>	<b>D<sub>sea0</sub></b>	<b>2001</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
	self-employed agric	100.0		113.6		13.6	
	employers agric	0.0	-100.0	108.2	-5.4	108.2	94.6
	employee agric	79.0	-21.0	115.2	1.6	36.1	22.6
	self-employed not agric	0.0	-100.0	198.3	84.7	198.3	184.7
	employers not agric	0.0	-100.0	104.3	-9.3	104.3	90.7
	employee not agric	156.1	56.1	188.6	75.0	32.4	18.9
desempleados /nlf	176.3	76.3	215.8	102.2	39.5	26.0	
<b>Thailand</b>		<b>1990</b>	<b>D<sub>sea0</sub></b>	<b>2002</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
	self-employed agric	100.0		173.3		73.3	
	employers agric	26.1	-73.9	233.7	60.5	207.6	134.4
	employee agric	274.8	174.8*	629.9	456.6	355.1	281.9
	self-employed not agric	183.5	83.5*	633.0	459.8	449.5	376.2
	employers not agric	227.8	127.8*	466.8	293.5	239.0*	165.7*
	employee not agric	482.8	382.8	614.9	441.7	132.2*	58.9*
desempleados /nlf	409.7	309.7	1315.1	1141.8	905.3	832.1	

Base 100 self-employed agric at first year: Cambodia 0.03%, India 1.02%, Indonesia 1.72%, Pakistan 1.94%, Thailand 0.23%. \*Indicates difference not statistically significant at 5%

Source: Author's calculations based on household survey data provided by the World Bank.

Some remarks:

- Just like in the African countries, small farmers exhibit low unemployment rates.
- Small farmers tend to have the lowest unemployment rates in Indonesia and Thailand.
- Not much to say regarding unemployment dynamics, having data for only two years.

**Table 4c. Relative differences in unemployment among rural households in Latin-America.** Source: Author's calculations based on household survey data provided by the World Bank.

Country	Group	Unemployment HH members 15 to 65 years old					
<b>Chile</b>		<b>1990</b>	<b>D<sub>sea0</sub></b>	<b>2003</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
	self-employed agric	100.0		109.6		9.6	
	employers agric	38.1	-61.9	84.5	-25.0	46.4	36.9
	employee agric	76.3	-23.7	96.8	-12.8	20.5	10.9
	self-employed not agric	159.6	59.6	107.9	-1.6*	-51.7	-61.2
	employers not agric	229.3	129.3	42.8	-66.7	-186.5	-196.0
	employee not agric	105.4	5.4	138.0	28.4	32.6	23.1
desempleados /nlf	508.2	408.2	486.1	376.5	-22.1	-31.7	
<b>Colombia</b>		<b>1995</b>	<b>D<sub>sea0</sub></b>	<b>2000</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
	self-employed agric	100.0		194.1		94.1	
	employers agric	55.0	-45.0	128.8	-65.3	73.8	-20.3
	employee agric	111.0	11.0	193.6	-0.5*	82.7	-11.4
	self-employed not agric	123.5	23.5	278.1	84.0	154.5	60.4
	employers not agric	80.4	-19.6	100.5	-93.6	20.2	-73.9
	employee not agric	157.2	57.2	285.4	91.3	128.2	34.1
desempleados /nlf	299.9	199.9	616.1	422.0	316.2	222.1	
<b>Costa Rica</b>		<b>1990</b>	<b>D<sub>sea0</sub></b>	<b>2003</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
	self-employed agric	100.0		282.6		182.6	
	employers agric	148.8	48.8	146.4	-136.2	-2.4*	-185.0
	employee agric	265.7	165.7	433.1	150.5	167.4	-15.2*
	self-employed not agric	289.3	189.3	329.0	46.4	39.7	-142.9
	employers not agric	232.1	132.1	227.7	-54.9	-4.3*	-186.9
	employee not agric	316.9	216.9	386.7	104.0	69.7	-112.9
desempleados /nlf	932.4	832.4	1518.6	1236.0	586.2	403.5	
<b>Guatemala</b>		<b>1989</b>	<b>D<sub>sea0</sub></b>	<b>2002</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
	self-employed agric	100.0		102.9		2.9*	
	employers agric	922.9	822.9	446.6	343.7	-476.3	-479.2
	employee agric	364.7	264.7	458.6	355.7	93.8	90.9
	self-employed not agric	577.2	477.2	131.7	28.7	-445.5	-448.4
	employers not agric	292.0	192.0	0.0	-102.9	-292.0	-294.9
	employee not agric	687.0	587.0	590.6	487.6	-96.4	-99.3
desempleados /nlf	1884.6	1784.6	2080.0	1977.1	195.5	192.6	
<b>Honduras</b>		<b>1995</b>	<b>D<sub>sea0</sub></b>	<b>2003</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
	self-employed agric	100.0		279.6		179.6	
	employers agric	0.0	-100.0	0.0	-279.6	0.0*	-179.6
	employee agric	315.9	215.9	322.9	43.3	7.0	-172.6
	self-employed not agric	878.7	778.7	759.0	479.4	-119.7	-299.3
	employers not agric	307.1	207.1	0.0	-279.6	-307.1	-486.7
	employee not agric	522.9	422.9	798.9	519.3	276.0	96.4
desempleados /nlf	2322.5	2222.5	3009.3	2729.7	686.9	507.3	

**Table 4c (cont). Relative differences in unemployment among rural households in Latin-America.**

Country	Group	Unemployment HH members 15 to 65 years old					
		1994	D <sub>sea0</sub>	2002	D <sub>sea1</sub>	D <sub>t</sub>	D <sub>sea1</sub> -D <sub>sea0</sub>
<b>Mexico</b>	self-employed agric	100.0		54.1		-45.9	
	employers agric	78.4	-21.6	43.8	-10.4	-34.6	11.3
	employee agric	242.0	142.0	58.7	4.5	-183.4	-137.5
	self-employed not agric	204.9	104.9	152.6	98.5	-52.3	-6.4
	employers not agric	9.4	-90.6	0.0	-54.1	-9.4	36.5
	employee not agric	328.5	228.5	320.6	266.4	-8.0	37.9
	desempleados /nlf	764.1	664.1	413.4	359.3	-350.7	-304.8
<b>Nicaragua</b>	self-employed agric	100.0		793.6		693.6	
	employer agric	0.0	-100.0	549.5	-244.1	549.5	-144.1
	employee agric	2238.1	2138.1	989.3	195.7	-1248.8	-1942.4
	self-employed no agric	4690.6	4590.6	3583.3	2789.7	-1107.3	-1800.9
	employer no agric	0.0	-100.0	1625.3	831.7	1625.3	931.7
	employee no agric	6397.6	6297.6	1417.8	624.2	-4979.8	-5673.4
	unemployed /nlf	17370.2	17270.2	5621.4	4827.8	-11748.8	-12442.4
<b>Paraguay</b>	self-employed agric	100.0		373.4		273.4	
	employers agric			0.0	-373.4		
	employee agric	79.4	-20.6	207.2	-166.1	127.8	-145.5
	self-employed not agric	275.7	175.7	469.1	95.8	193.4	-79.9
	employers not agric	249.6	149.6	465.5	92.2	215.9	-57.4
	employee not agric	447.7	347.7	1634.9	1261.6	1187.2	913.9
	desempleados /nlf	2453.4	2353.4	2933.0	2559.6	479.5	206.2
<b>Peru</b>	self-employed agric	100.0		1345.9		1245.9	
	employers agric			1615.2	269.3		
	employee agric	392.2	292.2	3409.1	2063.3	3016.9	1771.1
	self-employed not agric	537.5	437.5	2897.2	1551.4	2359.7	1113.9
	employers not agric			0.0	-1345.9		
	employee not agric	421.4	321.4	2394.2	1048.3	1972.8	726.9
	desempleados /nlf	3369.6	3269.6	7979.7	6633.9	4610.1	3364.2

Base 100 self-employed agric at first year: Chile 1.76%, Colombia 2.62%, Costa Rica 0.74%, Guatemala 0.31%, Honduras 0.22%  
Mexico 0.74%, Nicaragua 0.06%, Paraguay 0.34%, Peru 0.15%. \*Indicates difference not statistically significant at 5%

**Source: Author's calculations based on household survey data provided by the World Bank.**

Some remarks:

- Again, low unemployment rates for households with head self-employed in agriculture.
- With for some exceptions, small farmers tend to have higher unemployment rates than employers in agriculture and lower than self-employed and employees out of agriculture.
- Not much to say regarding unemployment dynamics, having data for only two years.

**Table 5a. Relative differences in diversification of employment sources among rural households in Africa.**

Country	Group	Simpson diversification index					
		1994	D <sub>sea0</sub>	2003	D <sub>sea1</sub>	D <sub>t</sub>	D <sub>sea1</sub> -D <sub>sea0</sub>
<b>Burkina Faso</b>	self-employed agric	100.0		77.4		-22.6	
	employers agric	161.3	61.3				
	employee agric	178.9	78.9	592.6	515.2	413.7	436.3
	self-employed not agric	1596.4	1496.4	1520.8	1443.4	-75.6	-53.0
	employers not agric	1432.3	1332.3				
	employee not agric	1303.2	1203.2	1311.8	1234.4	8.6	31.2
	desempleados /nlf	303.4	203.4	370.8	293.5	67.4	90.0
<b>Madagascar</b>	self-employed agric	100.0		206.8		106.8	
	employers agric			0.0	-206.8		
	employee agric	147.5	47.5	510.4	303.5	362.9	256.0
	self-employed not agric	2257.3	2157.3	2320.5	2113.7	63.2	-43.6
	employers not agric			2428.9	2222.0		
	employee not agric	2098.5	1998.5	2504.3	2297.4	405.8	298.9
	desempleados /nlf	419.9	319.9	1469.5	1262.7	1049.7	942.8
<b>Malawi</b>	self-employed agric	100.0		392.8		292.8	
	employers agric	627.4	527.4		-392.8	-627.4	-920.1
	employee agric	368.8	268.8	296.5	-96.3	-72.3	-365.1
	self-employed not agric	4209.6	4109.6	3817.1	3424.3	-392.5	-685.3
	employers not agric	4157.6	4057.6	4058.2	3665.4	-99.4	-392.2
	employee not agric	4227.1	4127.1	3677.6	3284.8	-549.6	-842.4
	desempleados /nlf	3458.6	3358.6	4001.1	3608.3	542.4	249.6

**Base 100 self-employed agric at first year: Burkina Faso 0.047, Madagascar 0.032, Malawi 0.018**

**Source: Author's calculations based on household survey data provided by the World Bank.**

Some remarks:

- Small farmers are the less diversified among all groups.
- Households with head self employed in agriculture (and all agriculturally based households) are extremely less diversified in terms of unemployment sources than not agriculturally based households. This reveals that when household head is a self employed (or in general works) in agriculture, the rest of the household members tend to stay in the sector.
- Mixed evidence regarding evolution of diversification gaps among groups.

**Table 5b. Relative differences in diversification of employment sources among rural households in Asia.**

Country	Group	Simpson diversification index					
		1997	D <sub>sea0</sub>	2004	D <sub>sea1</sub>	D <sub>t</sub>	D <sub>sea1</sub> _D <sub>sea0</sub>
<b>Cambodia</b>		100.0		250.7		150.7	
	self-employed agric	100.0		250.7		150.7	
	employers agric	450.1	350.1	213.4	-37.3	-236.6	-387.3
	employee agric	105.7	5.7	308.0	57.3	202.3	51.6
	self-employed not agric	912.3	812.3	900.9	650.2	-11.4	-162.1
	employers not agric	914.9	814.9	850.5	599.8	-64.4	-215.1
	employee not agric	976.0	876.0	1010.7	760.0	34.7	-116.1
desempleados /nlf	502.8	402.8	750.8	500.0	248.0	97.2	
<b>India</b>		100.0		113.0		13.0	
	self-employed agric	100.0		113.0		13.0	
	employers agric						
	employee agric	64.4	-35.6	74.4	-38.6	9.9	-3.0
	self-employed not agric	699.7	599.7	702.5	589.5	2.7	-10.2
	employee not agric						
	employee not agric	732.8	632.8	735.3	622.3	2.5	-10.5
desempleados /nlf	454.5	354.5	457.7	344.7	3.2	-9.8	
<b>Indonesia</b>		100.0		113.8		13.8	
	self-employed agric	100.0		113.8		13.8	
	employers agric	136.9	36.9	185.1	71.3	48.2	34.4
	employee agric	119.9	19.9	135.9	22.1	15.9	2.1
	self-employed not agric	497.8	397.8	444.5	330.7	-53.3	-67.1
	employers not agric	500.2	400.2	490.5	376.8	-9.7	-23.5
	employee not agric	465.2	365.2	501.8	388.0	36.6	22.8
desempleados /nlf	352.7	252.7	406.6	292.9	54.0	40.2	
<b>Pakistan</b>		100.0		101.7		1.7	
	self-employed agric	100.0		101.7		1.7	
	employers agric			82.9	-18.8	82.9	81.2
	employee agric	81.4	-18.6	98.5	-3.3	17.1	15.3
	self-employed not agric	243.9	143.9	367.7	265.9	123.7	122.0
	employers not agric	159.4	59.4	388.7	287.0	229.3	227.5
	employee not agric	363.0	263.0	378.0	276.2	14.9	13.2
desempleados /nlf	225.5	125.5	334.2	232.4	108.7	106.9	
<b>Thailand</b>		100.0		152.7		52.7	
	self-employed agric	100.0		152.7		52.7	
	employers agric	108.0	8.0	167.0	14.3	59.0	6.3
	employee agric	147.3	47.3	180.0	27.3	32.8	-20.0
	self-employed not agric	520.2	420.2	485.8	333.0	-34.4	-87.2
	employers not agric	553.0	453.0	550.3	397.5	-2.7	-55.5
	employee not agric	559.1	459.1	615.1	462.4	56.0	3.3
desempleados /nlf	458.3	358.3	491.6	338.8	33.2	-19.5	

Base 100 self-employed agric at first year: Cambodia 0.082, India 0.115, Indonesia 0.163, Pakistan 0.213, Thailand 0.132

Source: Author's calculations based on household survey data provided by the World Bank.

Some remarks:

- Small farmers is the group with the lowest diversification of income sources in South East Asia
- In India and Pakistan employees in agriculture are even less diversified.
- Just like in Africa, households with head self employed in agriculture (and all agriculturally based households) are extremely less diversified in terms of unemployment sources than not agriculturally based households.
- Very slow convergence of diversification gaps of small farmers respect to not agriculturally based households in India. In Pakistan, faster diversification convergence respect to employees in agriculture, because the latter is increasing diversification sources faster than small farmers.
- Employment diversification convergence in South East Asia respect to the highly diversified groups (non agricultural), with some exceptions.

**Table 5c. Relative differences in diversification of employment sources among rural households in Latin America.** Source: Author's calculations based on household survey data provided by the World Bank.

Country	Group	Simpson diversification index					
		1990	D <sub>sea0</sub>	2003	D <sub>sea1</sub>	D <sub>t</sub>	D <sub>sea1</sub> -D <sub>sea0</sub>
<b>Chile</b>	self-employed agric	100.0		129.4		29.4	
	employers agric	147.0	47.0	186.2	56.8	39.1	9.7
	employee agric	67.6	-32.4	120.0	-9.4	52.4	23.0
	self-employed not agric	428.8	328.8	424.1	294.7	-4.7	-34.1
	employers not agric	420.0	320.0	431.0	301.6	10.9	-18.5
	employee not agric	449.1	349.1	431.4	302.0	-17.7	-47.1
	desempleados /nlf	246.0	146.0	303.2	173.8	57.2	27.8
<b>Colombia</b>	self-employed agric	100.0		107.7		7.7	
	employers agric	91.4	-8.6	75.2	-32.4	-16.1	-23.8
	employee agric	88.6	-11.4	97.9	-9.7	9.4	1.7
	self-employed not agric	293.7	193.7	285.3	177.7	-8.3	-16.0
	employers not agric	276.4	176.4	262.1	154.5	-14.3	-21.9
	employee not agric	280.0	180.0	256.4	148.8	-23.6	-31.3
	desempleados /nlf	247.8	147.8	249.4	141.7	1.6	-6.1
<b>Costa Rica</b>	self-employed agric	100.0		96.9		-3.1	
	employers agric	89.9	-10.1	70.9	-26.0	-19.0	-15.9
	employee agric	89.6	-10.4	83.7	-13.3	-6.0	-2.9
	self-employed not agric	233.4	133.4	227.2	130.3	-6.2	-3.2
	employers not agric	233.9	133.9	183.3	86.4	-50.5	-47.5
	employee not agric	245.7	145.7	241.5	144.5	-4.2	-1.2
	desempleados /nlf	247.6	147.6	230.8	133.9	-16.8	-13.7
<b>Guatemala</b>	self-employed agric	100.0		84.0		-16.0	
	employers agric	170.9	70.9	114.2	30.2	-56.6	-40.7
	employee agric	121.3	21.3	62.2	-21.8	-59.1	-43.2
	self-employed not agric	177.3	77.3	183.9	99.9	6.7	22.6
	employers not agric	190.3	90.3	182.1	98.1	-8.2	7.8
	employee not agric	188.5	88.5	206.6	122.6	18.1	34.1
	desempleados /nlf	191.0	91.0	159.3	75.3	-31.7	-15.7
<b>Honduras</b>	self-employed agric	100.0		104.3		4.3	
	employers agric	144.5	44.5	131.4	27.2	-13.1	-17.4
	employee agric	99.5	-0.5	91.6	-12.7	-7.9	-12.1
	self-employed not agric	286.3	186.3	272.4	168.2	-13.8	-18.1
	employers not agric	274.3	174.3	274.1	169.8	-0.3	-4.5
	employee not agric	274.0	174.0	284.4	180.2	10.4	6.1
	desempleados /nlf	241.2	141.2	217.9	113.6	-23.3	-27.6

**Table 5c (cont.). Relative differences in diversification of employment sources among rural households in Latin America.**

Country	Group	Simpson diversification index					
		1994	D <sub>sea0</sub>	2002	D <sub>sea1</sub>	D <sub>t</sub>	D <sub>sea1</sub> _D <sub>sea0</sub>
Mexico	self-employed agric	100.0		114.8		14.8	
	employers agric	97.2	-2.8	92.9	-21.9	-4.3	-19.1
	employee agric	63.9	-36.1	101.4	-13.4	37.5	22.7
	self-employed not agric	255.0	155.0	246.2	131.4	-8.7	-23.5
	employers not agric	265.8	165.8	266.3	151.5	0.5	-14.3
	employee not agric	268.4	168.4	271.2	156.4	2.8	-12.0
	desempleados /nlf	190.7	90.7	226.7	111.9	36.0	21.2
Nicaragua	self-employed agric	100.0		137.0		37.0	
	employers agric			197.0	60.0	197.0	
	employee agric	109.1	9.1	122.9	-14.1	13.8	-23.2
	self-employed not agric	347.2	247.2	376.8	239.8	29.6	-7.4
	employers not agric	207.9	107.9	362.5	225.5	154.6	117.6
	employee not agric	338.2	238.2	396.9	259.8	58.6	21.6
	desempleados /nlf	310.7	210.7	320.6	183.6	9.9	-27.1
Paraguay	self-employed agric	100.0		152.3		52.3	
	employers agric			186.0	33.7		
	employee agric	60.5	-39.5	94.7	-57.6	34.2	-18.1
	self-employed not agric	448.3	348.3	448.0	295.7	-0.2	-52.5
	employers not agric	486.3	386.3	479.1	326.8	-7.2	-59.5
	employee not agric	497.4	397.4	501.6	349.3	4.1	-48.2
	desempleados /nlf	262.9	162.9	372.1	219.8	109.2	56.9
Peru	self-employed agric	100.0		115.4		15.4	
	employers agric			134.3	18.9		
	employee agric	134.5	34.5	109.1	-6.3	-25.4	-40.8
	self-employed not agric	379.9	279.9	368.0	252.5	-11.9	-27.3
	employers not agric	0.0	-100.0	378.0	262.5	378.0	362.5
	employee not agric	386.3	286.3	392.5	277.1	6.2	-9.3
	desempleados /nlf	204.3	104.3	339.7	224.2	135.4	120.0

**Base 100 self-employed agric in first year: Chile 0.192, Colombia 0.280, Costa Rica 0.320, Guatemala 0.402, Honduras 0.279, Mexico 0.306, Nicaragua 0.203, Paraguay 0.161, Peru 0.202**

**Source: Author's calculations based on household survey data provided by the World Bank.**

Some remarks:

- Small farmers and employees in agriculture are the less diversified groups.
- Households with head self employed in agriculture (and all agriculturally based households) are considerably less diversified in terms of unemployment sources than not agriculturally based households. These relative differences are lower than observed in African and Asia countries.
- Decreasing employment diversification gaps of small farmers respect to non agricultural households in all countries but Guatemala, Nicaragua and Honduras.

**Table 6a. Relative differences in access to electricity in rural households in African.**

Country	Group	Access to electricity					
		1991	D <sub>sea0</sub>	1998	D <sub>sea1</sub>	D <sub>t</sub>	D <sub>sea1</sub> _D <sub>sea0</sub>
Ghana	self-employed agric	100		303.0		203.0	
	employer agric						
	employee agric	98.7	-1.3*	328.4	25.4*	229.7*	26.7*
	self-employed no agric	484.0	384.0	961.9	658.9	477.9	274.9
	employer no agric			2031.9	1729.0		
	employee no agric	591.1	491.1	1452.3	1149.3	861.2	658.2
	unemployed /nlf	566.3	466.3	1242.2	939.2	675.9	472.9
Madagascar	self-employed agric	100.0		87.5		-12.5	
	employer agric			0.0	-87.5		
	employee agric	59.0	-41.0	506.4	418.9	447.5	460.0
	self-employed no agric	1109.9	1009.9	1084.9	997.4	-25.0*	-12.5*
	employer no agric			1986.7	1899.2		
	employee no agric	720.1	620.1	909.9	822.3	189.8	202.3
	unemployed /nlf	334.1	234.1	928.8	841.2	594.7	607.1

Base 100 self-employed agric at first year: Ghana 3.38%, Madagascar 1.81%

\*Indicates difference not statistically significant at 5%

Source: Author's calculations based on household survey data provided by the World Bank.

Some remarks:

- Increase in access to electricity of small farmers in Ghana during the period. Still low at the end of the period.
- Decrease in access of small farmers in Madagascar.
- Small farmers are the lowest access group, except for employees in agriculture.
- Divergence in access respect to non agricultural groups.

**Table 6b. Relative differences in access to electricity in rural households in Asia.**

Country	Group	Access to electricity					
		1993	D <sub>sea0</sub>	2002	D <sub>sea1</sub>	D <sub>t</sub>	D <sub>sea1</sub> -D <sub>sea0</sub>
<b>Indonesia</b>		100.0		271.7		171.7	
	self-employed agric	100.0		271.7		171.7	
	employer agric	175.3	75.3	330.8	59.1	155.5	-16.2
	employee agric	121.1	21.1	305.1	33.3	184.0	12.3
	self-employed no agric	191.6	91.6	360.5	88.7	168.8	-2.9
	employer no agric	248.0	148.0	367.8	96.1	119.8	-51.9
	employee no agric	221.8	121.8	365.6	93.9	143.8	-27.9
unemployed /nlf	177.2	77.2	331.6	59.8	154.4	-17.4	
<b>Pakistan</b>		100.0		116.4		16.4	
	self-employed agric	100.0		116.4		16.4	
	employer agric	36.1	-63.9	122.6	6.2	86.5	70.1
	employee agric	96.3	-3.7	88.9	-27.4	-7.4	-23.7
	self-employed no agric	107.0	7.0	154.3	37.9	47.3	30.9
	employer no agric	163.1	63.1	156.9	40.5	-6.2	-22.6
	employee no agric	133.8	33.8	149.7	33.3	15.9	-0.5
unemployed /nlf	133.9	33.9	156.6	40.2	22.7	6.3	
<b>Thailand</b>		100.0		121.3		21.3	
	self-employed agric	100.0		121.3		21.3	
	employer agric	105.1	5.1	121.9	0.6	16.9	-4.5
	employee agric	90.1	-9.9	117.5	-3.8	27.4	6.1
	self-employed no agric	117.2	17.2	123.8	2.4	6.5	-14.8
	employer no agric	121.6	21.6	123.7	2.3	2.1*	-19.3
	employee no agric	113.7	13.7	123.2	1.9	9.6	-11.8
unemployed /nlf	111.4	11.4	122.1	0.7	10.7	-10.6	

**Base 100 self-employed agricat first year: Indonesia 24.46%, Pakistan 51.31%, Thailand 80.41%**

**\*Indicates difference not statistically significant at 5%**

**Source: Author's calculations based on household survey data provided by the World Bank.**

Some remarks:

- Increase in access to electricity in all countries for small farmers.
- Small farmers and employees in agriculture have the lowest access to electricity.
- Gap reduction in access to electricity in Thailand.

**Table 6c. Relative differences in access to electricity in rural households in Latin America.**

Country	Group	Access to electricity					
		1990	D <sub>sea0</sub>	2003	D <sub>sea1</sub>	D <sub>t</sub>	D <sub>sea1</sub> -D <sub>sea0</sub>
<b>Chile</b>	self-employed agric	100.0		173.4		73.4	
	employer agric	151.6	51.6	191.9	18.6	40.3	-33.1
	employee agric	125.2	25.2	186.7	13.3	61.5	-11.9
	self-employed no agric	144.9	44.9	185.2	11.8	40.3	-33.1
	employer no agric	184.1	84.1	197.2	23.8	13.1	-60.3
	employee no agric	160.2	60.2	191.6	18.2	31.4	-42.0
	unemployed /nlf	116.9	16.9	182.1	8.8	65.2	-8.2
<b>Colombia</b>	self-employed agric	100.0		99.1		-0.9	
	employer agric	106.6	6.6	103.4	4.3	-3.2	-2.3
	employee agric	103.7	3.7	104.4	5.3	0.8	1.6
	self-employed no agric	114.1	14.1	117.5	18.4	3.4	4.3
	employer no agric	123.1	23.1	120.4	21.2	-2.8	-1.9
	employee no agric	120.2	20.2	118.6	19.5	-1.7	-0.8
	unemployed /nlf	111.9	11.9	114.2	15.0	2.2	3.1
<b>Mexico</b>	self-employed agric	100.0		116.6		16.6	
	employer agric	115.5	15.5	127.5	10.9	12.1	-4.6
	employee agric	95.7	-4.3	116.3	-0.3	20.6	4.0
	self-employed no agric	117.4	17.4	124.3	7.7	6.9	-9.7
	employer no agric	132.7	32.7	121.6	5.0	-11.1	-27.7
	employee no agric	119.5	19.5	121.1	4.4	1.6	-15.1
	unemployed /nlf	113.8	13.8	123.9	7.3	10.2	-6.5
<b>Paraguay</b>	self-employed agric	100.0		174.1		74.1	
	employer agric			209.4	35.3		
	employee agric	95.1	-4.9	160.9	-13.2	65.7	-8.4
	self-employed no agric	176.5	76.5	213.7	39.6	37.2	-36.9
	employer no agric	218.2	118.2	216.8	42.7	-1.4*	-75.5
	employee no agric	186.5	86.5	223.6	49.5	37.1	-37.0
	unemployed /nlf	150.8	50.8	201.1	27.0	50.3	-23.8
<b>Peru</b>	self-employed agric	100.0		153.1		53.1	
	employer agric			181.1	28.0		
	employee agric	133.1	33.1	217.7	64.6	84.6	31.5
	self-employed no agric	159.9	59.9	331.8	178.7	171.9	118.8
	employer no agric			389.7	236.5		
	employee no agric	227.3	127.3	357.2	204.1	130.0	76.8
	unemployed /nlf	130.2	30.2	299.1	145.9	168.9	115.7

Base 100 self-employed agric at first year: Chile 50.63%, Colombia 80.22%, Mexico 75.08%, Paraguay 42.77%, Peru 19.32%

\*Indicates difference not statistically significant at 5%

Source: Author's calculations based on household survey data provided by the World Bank.

Some remarks:

- Increase in access to electricity for small farmers in all countries but Colombia (practically unchanged).
- Small farmers have the lowest access among all rural groups, except for Mexico and Paraguay, where employees in agriculture have even lower access.

- General trend of convergence in access to electricity in Chile, Mexico and Paraguay. Divergence of small farmers respect to the other groups in Peru.

**Table 7a. Relative differences in consumption and evolution of gaps among rural households groups in African countries.**

Country	Group	Consumption per adult equivalent					
		1994	D <sub>sea0</sub>	2002	D <sub>sea1</sub>	D <sub>t</sub>	D <sub>sea1</sub> _D <sub>sea0</sub>
<b>Burkina Faso</b>		100.0		199.1		99.1	
	self-employed agric	100.0		199.1		99.1	
	employers agric	135.1	35.1				
	employee agric	152.9	52.9	282.5	83.4	129.6	30.5
	self-employed not agric	191.3	91.3	307.9	108.8	116.6	17.5
	employers not agric	407.0	307.0				
	employee not agric	335.9	235.9	663.3	464.1	327.4	228.2
desempleados /nlf	109.5	9.5	212.2	13.1	102.7	3.6	
<b>Ghana</b>		100.0		90.0		-10.0	
	self-employed agric	100.0		90.0		-10.0	
	employers agric						
	employee agric	79.7	-20.3	121.9	31.9	42.2	52.2
	self-employed not agric	126.0	26.0	139.3	49.3	13.3	23.3
	employers not agric			205.4	115.4		
	employee not agric	114.7	14.7	142.1	52.2	27.4	37.4
desempleados /nlf	111.4	11.4	114.6	24.6	3.2*	13.2*	
<b>Madagascar</b>		100.0		62.2		-37.8	
	self-employed agric	100.0		62.2		-37.8	
	employers agric			67.3	5.1		
	employee agric	103.1	3.1	104.0	41.8	0.9	38.7
	self-employed not agric	119.5	19.5	131.5	69.3	12.0	49.8
	employers not agric			379.2	317.0		
	employee not agric	141.7	41.7	156.2	94.0	14.5	52.2
desempleados /nlf	99.2	-0.8	119.6	57.4	20.4	58.2	
<b>Malawi</b>		100.0		115.7		15.7	
	self-employed agric	100.0		115.7		15.7	
	employers agric	159.1	59.1	101.5	-14.1	-57.5	-73.2
	employee agric	120.6	20.6	122.3	6.6	1.7	-14.0
	self-employed not agric	138.1	38.1	119.5	3.8	-18.5	-34.2
	employers not agric	177.9	77.9	151.7	36.0	-26.2	-41.9
	employee not agric	143.9	43.9	152.4	36.7	8.5	-7.2
desempleados /nlf	93.2	-6.8	111.1	-4.6	17.9	2.2	
<b>Uganda</b>		100.0		182.1		82.1	
	self-employed agric	100.0		182.1		82.1	
	employers agric	125.5	25.5	278.3	96.2	152.8	70.7
	employee agric	105.8	5.8	152.2	-29.8	46.4	-35.7
	self-employed not agric	148.3	48.3	247.8	65.7	99.5	17.4
	employers not agric	450.3	350.3	301.8	119.7	-148.5	-230.6
	employee not agric	132.0	32.0	277.0	94.9	145.0	62.9
desempleados /nlf	102.9	2.9	187.9	5.8	85.0	2.9	

Base 100 self-employed agric in first year: Burkina Faso 4415.42, Ghana 92780.09, Madagascar 80665.16, Malawi 737.66, Uganda 7869.77, real local currencies. \*Indicates difference not statistically significant at 5%

Source: Author's calculations based on household survey data provided by the World Bank.

Some remarks:

- Small farmers have increased their consumption, except for Ghana and Madagascar (the latter with doubtful consumption aggregates). In Uganda and Burkina Faso, small farmers have almost doubled their consumption.
- In general, small farmers are the lowest consumption group, in many cases showing even less consumption than households with head unemployed or not in the labor force.
- There is evidence of strong consumption divergence of small farmers respect to each other group in all countries but Malawi (reduction of consumption gaps) and Uganda (reversal respect to employees in agriculture).

**Table 7b. Relative differences in consumption and evolution of gaps among rural households groups in Asian countries.**

Country	Group	Consumption per adult equivalent					
<b>India</b>		<b>1993</b>	<b>D<sub>sea0</sub></b>	<b>1999</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
	self-employed agric	100.0		92.8		-7.2	
	employers agric						
	employee agric	74.3	-25.7	71.5	-21.3	-2.8	4.4
	self-employed not agric	101.2	1.2	93.3	0.5	-7.9	-0.7
	employers not agric						
	employee not agric	113.6	13.6	107.2	14.4	-6.4	0.8
desempleados /nlf	100.5	0.5	94.4	1.7	-6.0	1.2	
<b>Indonesia</b>		<b>1993</b>	<b>D<sub>sea0</sub></b>	<b>2002</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
	self-employed agric	100.0		135.3		35.3	
	employers agric	134.0	34.0	166.1	30.8	32.1	-3.2
	employee agric	94.9	-5.1	134.4	-0.9	39.5	4.2
	self-employed not agric	120.2	20.2	162.6	27.3	42.4	7.1
	employers not agric	156.9	56.9	203.9	68.6	47.0	11.7
	employee not agric	140.1	40.1	179.0	43.8	38.9	3.6
desempleados /nlf	113.1	13.1	150.6	15.3	37.5	2.2	
<b>Pakistan</b>		<b>1991</b>	<b>D<sub>sea0</sub></b>	<b>2001</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
	self-employed agric	100.0		70.0		-30.0	
	employers agric	66.0	-34.0	85.5	15.5	19.6	49.5
	employee agric	90.3	-9.7	63.9	-6.1	-26.4	3.6
	self-employed not agric	303.1	203.1	73.6	3.6	-229.5	-199.5
	employers not agric	76.0	-24.0	90.7	20.6	14.7	44.7
	employee not agric	101.1	1.1	71.7	1.7	-29.4	0.6
desempleados /nlf	114.7	14.7	79.5	9.4	-35.2	-5.2	
<b>Thailand</b>		<b>1990</b>	<b>D<sub>sea0</sub></b>	<b>2002</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
	self-employed agric	100.0		128.8		28.8	
	employers agric	134.1	34.1	158.3	29.5	24.2	-4.6
	employee agric	115.6	15.6	128.7	-0.1	13.1	-15.7
	self-employed not agric	180.9	80.9	214.1	85.3	33.3	4.5*
	employers not agric	383.1	283.1	327.7	198.9	-55.4	-84.2
	employee not agric	195.5	95.5	240.8	112.0	45.2	16.5
desempleados /nlf	135.8	35.8	158.9	30.1	23.1	-5.7	

Base 100 self-employed agric in first year: India 568.40, Indonesia 82903.30, Pakistan 1190.38,

Thailand 1233.44, real local currencies. \*Indicates difference not statistically significant at 5%

Source: Author's calculations based on household survey data provided by the World Bank.

Some remarks:

- Small farmers have decreased their consumption in India and Pakistan and increased in Indonesia and Thailand.
- In general, households with head self employed in agriculture have higher consumption than employees in agriculture, but lower than any other group, with the exception of Pakistan 1991.
- Mixed evidence regarding evolution of consumption gaps, changing according to the country and rural household group.

**Table 7c. Relative differences in income and evolution of gaps among rural households groups in Latin-American countries.** Source: Author's calculations based on household survey data provided by the World Bank.

Country	Group	Income per adult equivalent					
		1990	D <sub>sea0</sub>	2003	D <sub>sea1</sub>	D <sub>t</sub>	D <sub>sea1</sub> -D <sub>sea0</sub>
<b>Chile</b>		100.0		117.1		17.1	
	self-employed agric	100.0		117.1		17.1	
	employers agric	482.7	382.7	546.4	429.3	63.7	46.7
	employee agric	53.5	-46.5	73.1	-44.0	19.6	2.5
	self-employed not agric	88.1	-11.9	175.4	58.3	87.3	70.2
	employers not agric	654.6	554.6	683.9	566.9	29.4	12.3*
	employee not agric	91.5	-8.5	135.9	18.9	44.4	27.3
	desempleados /nlf	41.7	-58.3	78.9	-38.2	37.2	20.1
<b>Colombia</b>		100.0		72.9		-27.1	
	self-employed agric	100.0		72.9		-27.1	
	employers agric	152.2	52.2	110.6	37.8	-41.6	-14.4
	employee agric	131.5	31.5	130.6	57.7	-0.9	26.2
	self-employed not agric	137.5	37.5	140.1	67.3	2.7	29.8
	employers not agric	185.1	85.1	353.3	280.4	168.2	195.3
	employee not agric	207.6	107.6	225.7	152.8	18.1	45.2
	desempleados /nlf	131.8	31.8	100.2	27.4	-31.6	-4.5
<b>Guatemala</b>		100.0		74.9		-25.1	
	self-employed agric	100.0		74.9		-25.1	
	employers agric	922.5	822.5	180.6	105.7	-741.9	-716.8
	employee agric	152.4	52.4	92.9	18.0	-59.5	-34.5
	self-employed not agric	235.7	135.7	185.8	110.9	-49.9	-24.8
	employers not agric	561.6	461.6	360.4	285.5	-201.2	-176.1
	employee not agric	274.3	174.3	162.3	87.4	-112.0	-86.9
	desempleados /nlf	201.4	101.4	67.7	-7.2	-133.7	-108.6
<b>Honduras</b>		100.0		46.3		-53.7	
	self-employed agric	100.0		46.3		-53.7	
	employers agric	283.5	183.5	168.9	122.6	-114.6	-60.9
	employee agric	38.5	-61.5	36.7	-9.6	-1.9	51.9
	self-employed not agric	47.0	-53.0	65.7	19.4	18.7	72.4
	employers not agric	125.8	25.8	139.2	92.9	13.4	67.1
	employee not agric	72.4	-27.6	87.3	41.0	14.9	68.6
	desempleados /nlf	5341.0	5241.0	64.8	18.6	-5276.2	-5222.5

**Table 7c (cont.). Relative differences in income and evolution of gaps among rural households groups in Latin-American countries.**

Country	Group	Income per adult equivalent					
		1994	D <sub>sea0</sub>	2002	D <sub>sea1</sub>	D <sub>t</sub>	D <sub>sea1</sub> -D <sub>sea0</sub>
Mexico	self-employed agric	100.0		97.1		-2.9	
	employers agric	189.3	89.3	304.8	207.7	115.5	118.5
	employee agric	101.2	1.2	103.5	6.4	2.3	5.2
	self-employed not agric	139.3	39.3	116.1	19.0	-23.3	-20.4
	employers not agric	441.2	341.2	184.7	87.6	-256.5	-253.6
	employee not agric	177.5	77.5	249.8	152.7	72.4	75.3
	desempleados /nlf	102.0	2.0	79.4	-17.7	-22.6	-19.7
Nicaragua	self-employed agric	100.0		280.0		180.0	
	employer agric	623.1	523.1	595.4	315.4	-27.7	-207.7
	employee agric	230.3	130.3	302.2	22.3	72.0	-108.0
	self-employed no agric	342.4	242.4	496.4	216.4	154.0	-26.0
	employer no agric	428.5	328.5	919.7	639.7	491.2	311.2
	employee no agric	335.4	235.4	435.9	156.0	100.6	-79.4
	unemployed /nlf	175.6	75.6	331.4	51.4	155.8	-24.2
Paraguay	self-employed agric	100.0		78.2		-21.8	
	employers agric			487.3	409.2		
	employee agric	156.8	56.8	117.0	38.9	-39.8	-18.0
	self-employed not agric	252.2	152.2	151.7	73.5	-100.5	-78.7
	employers not agric	465.0	365.0	211.2	133.0	-253.8	-232.0
	employee not agric	187.4	87.4	180.7	102.6	-6.7	15.2
	desempleados /nlf	109.0	9.0	96.1	17.9	-12.9	8.9
Peru	self-employed agric	100.0		84.4		-15.6	
	employers agric			138.4	54.0		
	employee agric	105.8	5.8	128.3	43.9	22.5	38.1
	self-employed not agric	132.1	32.1	171.4	87.0	39.4	55.0
	employers not agric			276.2	191.8		
	employee not agric	134.5	34.5	223.3	138.9	88.8	104.4
	desempleados /nlf	108.4	8.4	161.6	77.2	53.1	68.8

Base 100 self-employed agric in first year: Chile 75379.52, Colombia 64103.00, Guatemala 193.50, Honduras 1203.13, Mexico 474.74

Nicaragua 124.68, Paraguay 146767.40, Peru 106.00, real local currencies. \*Indicates difference not statistically significant at 5%

Source: Author's calculations based on household survey data provided by the World Bank.

Some remarks:

- In general, there is a decrease in small farmers income. Exceptions are Chile and Nicaragua.
- Household with head self-employed in agriculture, tend to have the lowest income among all groups, except in Chile and Honduras. Remarkable gaps specially respect to employers in agriculture and not agriculturally based households.
- Chile shows an interesting situation of reversal of income gaps of small farmers respect to self employed and employees out of agriculture, which were initially worst but finally better.
- Evidence of income divergence respect to the other groups in Colombia and Peru. Reduction of gaps in Guatemala (a case of overall impoverishment).

**Table 8a. Relative differences in poverty and evolution of the differences among rural households groups in African countries.**

Country	Group	Headcount of people below US\$ 1 PPP a day					
		1994	D <sub>sea0</sub>	2002	D <sub>sea1</sub>	D <sub>t</sub>	D <sub>sea1</sub> -D <sub>sea0</sub>
<b>Burkina Faso</b>		100.0		43.4		-56.6	
	self-employed agric	100.0		43.4		-56.6	
	employers agric	66.7	-33.3				
	employee agric	89.4	-10.6	32.2	-11.2	-57.2	-0.6*
	self-employed not agric	66.1	-33.9	20.3	-23.1	-45.8	10.8
	employers not agric	0.0	-100.0				
	employee not agric	39.9	-60.1	4.8	-38.6	-35.1	21.5
desempleados /nlf	88.7	-11.3	48.2	4.8	-40.5	16.1	
<b>Ghana</b>		100.0		97.3		-2.7	
	self-employed agric	100.0		97.3		-2.7	
	employers agric						
	employee agric	132.8	32.8	0.0	-97.3	-132.8	-130.0
	self-employed not agric	22.7	-77.3	15.3	-81.9	-7.4	-4.6
	employers not agric						
	employee not agric	40.4	-59.6	0.0	-97.3	-40.4	-37.7
desempleados /nlf	76.2	-23.8	7.0	-90.3	-69.2	-66.5	
<b>Madagascar</b>		100.0		191.0		91.0	
	self-employed agric	100.0		191.0		91.0	
	employers agric			0.0	-191.0		
	employee agric	37.4	-62.6	38.7	-152.2	1.4*	-89.6
	self-employed not agric	0.0	-100.0	0.0	-191.0	0.0	-91.0
	employers not agric			0.0	-191.0		
	employee not agric	58.3	-41.7	0.0	-191.0	-58.3	-149.2
desempleados /nlf	212.9	112.9	94.7	-96.3	-118.2	-209.2	
<b>Malawi</b>		100.0		35.5		-64.5	
	self-employed agric	100.0		35.5		-64.5	
	employers agric	76.6	-23.4	51.6	16.2	-24.9	39.6
	employee agric	73.0	-27.0	27.4	-8.0	-45.5	19.0
	self-employed not agric	66.4	-33.6	33.4	-2.1	-33.0	31.5
	employers not agric	56.7	-43.3	36.6	1.1	-20.1	44.4
	employee not agric	61.9	-38.1	25.3	-10.2	-36.6	27.9
desempleados /nlf	110.6	10.6	46.6	11.1	-64.0	0.5	
<b>Uganda</b>		100.0		64.8		-35.2	
	self-employed agric	100.0		64.8		-35.2	
	employer agric	72.9	-27.1	2.3	-62.5	-70.5	-35.3
	employee agric	100.6	0.6	83.6	18.8	-17.0	18.2
	self-employed no agric	65.7	-34.3	46.0	-18.8	-19.6	15.6
	employer no agric	14.1	-85.9	30.8	-34.0	16.7	51.9
	employee no agric	79.5	-20.5	39.5	-25.3	-40.0	-4.8
unemployed /nlf	100.5	0.5	69.9	5.1	-30.6	4.6	

Base 100 self-employed agric at first year: Burkina Faso 75.94%, Ghana 69.90%, Madagascar 1.68%, Malawi 43.80%,

Uganda 72.89%. \*Indicates difference not statistically significant at 5%

**Source: Author's calculations based on household survey data provided by the World Bank.**

Some remarks:

- Strong reduction of poverty incidence in households with head self employed in agriculture during the 90's in all countries but Madagascar (this latter is likely to have problems with consumption aggregates).
- Small farmers are one of the groups with highest poverty incidences in almost all countries/years, except for the group of households with head unemployed or not in the labor force. In Uganda small farmers have less poverty incidence than employees in agriculture.

- Reduction of gaps among groups in Burkina Faso and Malawi. Poverty divergence in Ghana, where all groups have diminished poverty faster than small farmers. Evolution of poverty differences in Uganda depends on the comparison group, no clear pattern.

**Table 8b. Relative differences in poverty and evolution of the differences among rural households groups in Asian countries.**

Country	Group	Headcount of people below US\$ 1 PPP a day					
		1993	D <sub>sea0</sub>	1999	D <sub>sea1</sub>	D <sub>t</sub>	D <sub>sea1</sub> _D <sub>sea0</sub>
<b>India</b>	self-employed agric	100.0		44.5		-55.5	
	employers agric						
	employee agric	214.0	114.0	109.6	65.0	-104.4	-49.0
	self-employed not agric	91.7	-8.3	45.6	1.0	-46.2	9.3
	employers not agric						
	employee not agric	88.8	-11.2	38.9	-5.6	-49.9	5.6
	desempleados /nlf	118.0	18.0	63.0	18.5	-55.0	0.5
<b>Indonesia</b>	self-employed agric	100.0		43.7		-56.3	
	employers agric	41.5	-58.5	28.3	-15.4	-13.2	43.1
	employee agric	112.2	12.2	43.8	0.1	-68.4	-12.1
	self-employed not agric	65.8	-34.2	23.3	-20.4	-42.5	13.8
	employers not agric	35.8	-64.2	9.8	-33.9	-26.0	30.3
	employee not agric	46.0	-54.0	17.4	-26.2	-28.6	27.8
	desempleados /nlf	84.5	-15.5	43.4	-0.3	-41.1	15.2
<b>Pakistan</b>	self-employed agric	100.0		119.8		19.8	
	employers agric	528.3	428.3	32.9	-86.9	-495.4	-515.2
	employee agric	170.9	70.9	137.9	18.1	-33.0	-52.8
	self-employed not agric	0.0	-100.0	86.9	-32.9	86.9	67.1
	employers not agric	0.0	-100.0	107.5	-12.3	107.5	87.7
	employee not agric	86.9	-13.1	103.8	-16.0	16.9	-2.9
	desempleados /nlf	92.3	-7.7	75.4	-44.4	-16.9	-36.7
<b>Thailand</b>	self-employed agric	100.0		5.5		-94.5	
	employers agric	39.4	-60.6	2.4	-3.1	-37.0	57.5
	employee agric	66.3	-33.7	9.2	3.7	-57.1	37.4
	self-employed not agric	24.3	-75.7	0.0	-5.5	-24.3	70.2
	employers not agric	0.0	-100.0	0.0	-5.5	0.0	94.5
	employee not agric	27.2	-72.8	0.7	-4.8	-26.5	68.0
	desempleados /nlf	63.9	-36.1	0.9	-4.6	-63.0	31.5

**Base 100 self-employed agric at first year: India 18.71%, Indonesia 36.38%, Pakistan 8.47%, Thailand 9.18%**

**\*Indicates difference not statistically significant at 5%**

**Source: Author's calculations based on household survey data provided by the World Bank.**

Some remarks:

- Reduction of poverty incidence in all countries but Pakistan for small farming households.
- Small farmers are less poor than employees in agriculture, but poorer than not agriculturally based households.
- In general there is evidence of reduction of the differences in incidence of poverty among groups in time.

**Table 8c. Relative differences in poverty and evolution of the differences among rural households groups in Latin-American countries.** Source: Author's calculations based on household survey data provided by the World Bank.

Country	Group	Headcount of people below US\$ 1 PPP a day					
		1990	D <sub>sea0</sub>	2003	D <sub>sea1</sub>	D <sub>t</sub>	D <sub>sea1</sub> -D <sub>sea0</sub>
<b>Chile</b>		100.0		13.7		-86.3	
	self-employed agric	100.0		13.7		-86.3	
	employers agric	0.0	-100.0	3.6	-10.1	3.6	89.9
	employee agric	64.3	-35.7	11.9	-1.8	-52.4	33.9
	self-employed not agric	44.8	-55.2	6.8	-6.8	-38.0	48.3
	employers not agric	0.0	-100.0	0.0	-13.7	0.0	86.3
	employee not agric	33.0	-67.0	4.2	-9.4	-28.8	57.5
desempleados /nlf	424.4	324.4	41.9	28.3	-382.5	-296.1	
<b>Colombia</b>		100.0		137.8		37.8	
	self-employed agric	100.0		137.8		37.8	
	employers agric	56.1	-43.9	101.5	-36.3	45.3	7.6
	employee agric	19.0	-81.0	33.6	-104.2	14.5	-23.2
	self-employed not agric	64.9	-35.1	87.7	-50.1	22.8	-14.9
	employers not agric	16.8	-83.2	59.6	-78.2	42.9	5.1
	employee not agric	20.0	-80.0	43.5	-94.3	23.5	-14.2
desempleados /nlf	61.9	-38.1	116.0	-21.8	54.0	16.3	
<b>Guatemala</b>		100.0		111.1		11.1	
	self-employed agric	100.0		111.1		11.1	
	employers agric	4.6	-95.4	91.5	-19.7	86.9	75.7
	employee agric	22.2	-77.8	58.3	-52.9	36.1	25.0
	self-employed not agric	11.8	-88.2	16.0	-95.2	4.1	-7.0
	employers not agric	2.0	-98.0	0.0	-111.1	-2.0	-13.1
	employee not agric	5.2	-94.8	15.2	-95.9	10.0	-1.1
desempleados /nlf	33.3	-66.7	105.7	-5.4	72.5	61.3	
<b>Honduras</b>		100.0		34.6		-65.4	
	self-employed agric	100.0		34.6		-65.4	
	employers agric	0.0	-100.0	4.9	-29.7	4.9	70.3
	employee agric	45.4	-54.6	47.5	12.8	2.1	67.5
	self-employed not agric	44.9	-55.1	19.9	-14.7	-25.0	40.3
	employers not agric	0.0	-100.0	0.0	-34.6	0.0	65.4
	employee not agric	18.0	-82.0	9.9	-24.8	-8.2	57.2
desempleados /nlf	61.8	-38.2	41.7	7.1	-20.1	45.3	
<b>Mexico</b>		100.0		101.4		1.4	
	self-employed agric	100.0		101.4		1.4	
	employers agric	60.9	-39.1	56.8	-44.6	-4.1	-5.5
	employee agric	73.4	-26.6	34.4	-67.0	-39.0	-40.5
	self-employed not agric	58.8	-41.2	55.1	-46.3	-3.7	-5.1
	employers not agric	1.8	-98.2	59.7	-41.7	57.9	56.5
	employee not agric	12.6	-87.4	15.7	-85.8	3.1	1.7
desempleados /nlf	98.1	-1.9	121.1	19.7	23.0	21.5	

**Table 8c (cont.). Relative differences in poverty and evolution of the differences among rural households groups in Latin-American countries.**

Country	Group	Headcount of people below US\$ 1 PPP a day					$D_{sea1} - D_{sea0}$
		1993	$D_{sea0}$	2001	$D_{sea1}$	$D_t$	
Nicaragua		100.0		18.3		-81.7	
	self-employed agric	100.0		18.3		-81.7	
	employer agric	0.0	-100.0	22.8	4.5	22.8	104.5
	employee agric	10.6	-89.4	5.0	-13.3	-5.5	76.1
	self-employed no agric	20.8	-79.2	1.0	-17.3	-19.8	61.9
	employer no agric	114.0	14.0	13.7	-4.6	-100.2	-18.6
	employee no agric	9.7	-90.3	5.7	-12.6	-4.0	77.7
	unemployed /nlf	72.2	-27.8	16.4	-1.9	-55.8	25.9
Paraguay		100.0		120.1		20.1	
	self-employed agric	100.0		120.1		20.1	
	employers agric			67.0	-53.1		
	employee agric	35.5	-64.5	14.0	-106.1	-21.5	-41.6
	self-employed not agric	22.8	-77.2	10.7	-109.4	-12.1	-32.2
	employers not agric	0.0	-100.0	0.0	-120.1	0.0	-20.1
	employee not agric	2.8	-97.2	0.9	-119.2	-1.9	-22.0
	desempleados /nlf	122.1	22.1	66.9	-53.2	-55.2	-75.3
Peru		100.0		65.5		-34.5	
	self-employed agric	100.0		65.5		-34.5	
	employers agric			33.5	-32.0		
	employee agric	46.4	-53.6	17.0	-48.5	-29.3	5.2
	self-employed not agric	56.6	-43.4	11.3	-54.2	-45.2	-10.7
	employers not agric			2.3	-63.2		
	employee not agric	43.4	-56.6	4.1	-61.4	-39.3	-4.8
	desempleados /nlf	79.3	-20.7	17.4	-48.1	-62.0	-27.5

Base 100 self-employed agric in first year: Chile 8.83%, Colombia 30.49%, Guatemala 52.57%, Honduras 41.43%, Mexico 40.29%, Nicaragua 60.06%, Paraguay 21.40%, Peru 45.22%.

\*Indicates difference not statistically significant at 5%

Source: Author's calculations based on household survey data provided by the World Bank.

Some remarks:

- Mixed evidence on changes in poverty incidence of small farming rural households. Important poverty reductions in Chile, Honduras, Nicaragua and Peru. Major increase in Colombia and Paraguay.
- Small farmers are generally the poorest group among rural households in the region, except for households with head unemployed or not in the labor force in some cases.
- General convergence in Chile, Honduras and Nicaragua.
- Increase in poverty differences of small farmers respect to the other groups in Paraguay (small farmers impoverishing while the other groups are overcoming poverty) and in Peru (respect to agriculturally-based households). In this latter country, the exception is the reduction of the difference between self employed and employees in agriculture.

**Table 9a. Relative differences in consumption inequality and evolution of the differences among rural households groups in African countries.**

Country	Group	Gini of consumption					
		1994	D <sub>sea0</sub>	2002	D <sub>sea1</sub>	D <sub>t</sub>	D <sub>sea1</sub> _D <sub>sea0</sub>
<b>Burkina Faso</b>		100.0		106.0		6.0	
	self-employed agric	100.0		106.0		6.0	
	employers agric	105.9	5.9			-105.9	-5.9
	employee agric	132.4	32.4	131.1	25.2	-1.3*	-7.3*
	self-employed not agric	126.5	26.5	111.5	5.5	-15.0	-20.9
	employers not agric	41.2	-58.8			-41.2	58.8
	employee not agric	139.6	39.6	128.9	22.9	-10.7*	-16.6*
desempleados /nlf	116.0	16.0	123.1	17.1	7.1*	1.1*	
<b>Ghana</b>		100.0		102.8		2.8*	
	self-employed agric	100.0		102.8		2.8*	
	employers agric						
	employee agric	85.1	-14.9	87.5	-15.3*	2.4*	-0.4*
	self-employed not agric	101.8	1.8*	106.7	3.9*	4.9*	2.1*
	employers not agric			100.3	-2.6*		
	employee not agric	92.6	-7.4*	81.5	-21.4	-11.1	-14.0
desempleados /nlf	99.0	-1.0*	100.8	-2.0*	1.8*	-1.0*	
<b>Madagascar</b>		100.0		92.0		-8.0	
	self-employed agric	100.0		92.0		-8.0	
	employers agric			97.6	-5.6*		
	employee agric	95.1	4.9*	127.3	35.3	32.2	0.0
	self-employed not agric	105.9	5.9*	98.6	6.6*	-7.3*	-65.5*
	employers not agric			106.1	14.1*		
	employee not agric	92.7	7.3*	104.7	12.7	12.0	8.5
desempleados /nlf	89.8	-10.2	120.9	28.9	31.1	-85.6	
<b>Malawi</b>		100.0		86.4		-13.6	
	self-employed agric	100.0		86.4		-13.6	
	employers agric	136.0	36.0	72.5	-13.9*	-63.6	-49.9
	employee agric	107.0	7.0	91.7	5.4*	-15.2713	-1.6*
	self-employed not agric	111.9	11.9	89.7	3.3*	-22.2	-8.6
	employers not agric	135.6	35.6	88.8	2.4*	-46.8	-33.2
	employee not agric	114.2	14.2	109.8	23.5	-4.4*	9.2
desempleados /nlf	105.2	5.2	93.1	6.7	-12.1	1.6*	
<b>Uganda</b>		100.0		124.4		24.4	
	self-employed agric	100.0		124.4		24.4	
	employers agric	108.3	8.3*	65.5	-58.9	-42.8	-67.2
	employee agric	105.0	5.0*	142.2	17.8	37.1	12.7*
	self-employed not agric	107.6	7.6	130.9	6.5	23.3	-1.1*
	employers not agric	148.1	48.1	114.4	-10.1*	-33.7	-58.1
	employee not agric	106.6	6.6	136.6	12.2	30.0	5.5*
desempleados /nlf	105.4	5.4	152.2	27.7	46.8	22.4	

Base 100 self-employed agric in first year: Burkina Faso 0.35, Malawi 0.34, Morocco 0.32, Uganda 0.34

Significance test based on bootstrap standard errors (n. reps. = 100)

\*Indicates difference not statistically significant at 5%

Source: Author's calculations based on household survey data provided by the World Bank.

Some remarks:

- Increase in consumption inequality among rural small farming households in Burkina Faso and Uganda, countries with major consumption increases and poverty reductions. It appears to be a positive relation between economic growth and inequality among small farmers in these countries.
- Malawi seems to be an example of pro-poor growth, at least for small farmers. This group exhibits income increase and poverty and inequality reduction.
- Ghana is an extremely, particular case. For small farmers there is a decrease in average income, associated to a slightly decreasing poverty incidence (almost constant) and an increase in inequality.
- No clear pattern regarding relative differences of inequality between small farmers and the other groups, but in general, it appears to a more equal consumption distribution for small farmers respect to not agriculturally based households.
- Reducing inequality gaps in Burkina Faso and Malawi. Inequality divergence in Ghana. Mixed evidence depending on the comparison group in Uganda.

**Table 9b. Relative differences in consumption inequality and evolution of the differences among rural households groups in Asian countries.**

Country Group	Gini of consumption					
	1997	D <sub>sea0</sub>	2004	D <sub>sea1</sub>	D <sub>t</sub>	D <sub>sea1</sub> -D <sub>sea0</sub>
<b>Cambodia</b>						
self-employed agric	100.0		93.2		-6.8	
employers agric	123.6	23.6*	89.7	-3.6*	-33.9*	-27.1*
employee agric	89.4	-10.6	90.3	-2.9*	0.9*	7.7*
self-employed not agric	102.7	2.7*	118.9	25.7	16.2	22.9
employers not agric	147.0	47.0	169.8	76.6	22.8*	29.5*
employee not agric	91.0	-9.0	124.0	30.7	33.0	39.8
desempleados /nlf	102.5	2.5*	108.2	15.0	5.7*	12.5
<b>India</b>	<b>1993</b>	<b>D<sub>sea0</sub></b>	<b>1999</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
self-employed agric	100.0		85.7		-14.3	
employers agric						
employee agric	85.5	85.5	73.6	73.6	-11.9	-11.9*
self-employed not agric	99.8	99.8	89.0	89.0	-10.8	-10.8
employers not agric						
employee not agric	112.7	112.7	102.5	102.5	-10.2	-10.2
desempleados /nlf	109.0	109.0	97.8	97.8	-11.1	-11.1
<b>Indonesia</b>	<b>1993</b>	<b>D<sub>sea0</sub></b>	<b>2002</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
self-employed agric	100.0		96.9		-3.1	
employers agric	114.1	14.1	116.3	19.4	2.2*	5.3*
employee agric	95.7	-4.3	95.0	-1.8	-0.7*	2.4
self-employed not agric	111.5	11.5	106.9	10.0	-4.6	-1.5*
employers not agric	134.5	34.5	123.0	26.1	-11.6	-8.4
employee not agric	122.6	22.6	114.4	17.5	-8.2	-5.1
desempleados /nlf	116.6	16.6	117.2	20.3	0.6*	3.7
<b>Pakistan</b>	<b>1991</b>	<b>D<sub>sea0</sub></b>	<b>2001</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
self-employed agric	100.0		66.9		-33.1	
employers agric	89.7	-10.3*	71.3	4.4	-18.4*	14.7*
employee agric	113.8	13.8*	63.4	-3.5	-50.4	-17.4
self-employed not agric	85.4	-14.6*	68.5	1.6*	-17.0*	16.1*
employers not agric	56.9	-43.1	84.6	17.6	27.6	60.7
employee not agric	99.2	-0.8*	70.0	3.1	-29.2	3.9*
desempleados /nlf	116.8	16.8	74.0	7.1	-42.8	-9.7
<b>Thailand</b>	<b>1990</b>	<b>D<sub>sea0</sub></b>	<b>2002</b>	<b>D<sub>sea1</sub></b>	<b>D<sub>t</sub></b>	<b>D<sub>sea1</sub>-D<sub>sea0</sub></b>
self-employed agric	100.0		84.9		-15.1	
employers agric	107.3	7.3	91.7	6.8	-15.6	-0.5*
employee agric	106.3	6.3*	86.5	1.6*	-19.8	-4.7*
self-employed not agric	116.0	16.0	93.4	8.5	-22.6	-7.5*
employers not agric	148.1	48.1	125.2	40.3	-22.9*	-7.8*
employee not agric	119.0	19.0	109.4	24.5	-9.6	5.5*
desempleados /nlf	116.1	16.1	102.2	17.4	-13.9	1.2*

**Base 100 self-employed agric in first year: Cambodia 0.31, India 0.27, Indonesia 0.23, Pakistan 0.33, Th**  
**Significance test based on bootstrap standard errors (n. reps. = 100)**

**\*Indicates difference not statistically significant at 5%**

**Source: Author's calculations based on household survey data provided by the World Bank.**

Some remarks:

- Reduction of inequality in small farming rural households of all countries of the region. Evidence of three patterns of development for small farmers: economic growth with poverty and inequality reduction in South East Asia, consumption decrease with increase in poverty and inequality reduction (Pakistan) and finally one of consumption decrease with decrease in poverty and inequality reduction (India).
- Small farmers are one of the most equal groups in South East Asian countries, but one of the poorest at the same time.
- In general, there is inequality convergence respect to employees in agriculture. Mixed evidence respect to the other groups.

**Table 9c. Relative differences in consumption inequality and evolution of the differences among rural households groups in Latin-American countries.**

Country	Group	Gini of income					
		1990	D <sub>sea0</sub>	2003	D <sub>sea1</sub>	D <sub>t</sub>	D <sub>sea1</sub> _D <sub>sea0</sub>
<b>Chile</b>		100.0		82.6		-17.4	
	self-employed agric	100.0		82.6		-17.4	
	employers agric	120.6	20.6	107.1	24.5	-13.6	3.8*
	employee agric	69.6	-30.4	62.1	-20.5	-7.5	9.9
	self-employed not agric	80.6	-19.4	88.5	5.9	7.9	25.3
	employers not agric	89.3	-10.7*	92.1	9.5	2.7*	20.1
	employee not agric	92.5	-7.5	93.6	11.0	1.1*	18.5
desempleados /nlf	101.8	1.8*	93.6	11.0	-8.2	9.1	
<b>Colombia</b>		100.0		114.9		14.9	
	self-employed agric	100.0		114.9		14.9	
	employers agric	92.1	-7.9	115.3	0.4	23.2*	8.4*
	employee agric	68.7	-31.3	81.8	-33.1	13.1*	-1.8
	self-employed not agric	100.3	0.3*	118.9	4.0	18.6*	3.7*
	employers not agric	85.6	-14.4	128.9	14.0	43.3	28.4
	employee not agric	88.6	-11.4	100.8	-14.1	12.2*	-2.7
desempleados /nlf	86.8	-13.2	112.2	-2.7	25.4	10.6*	
<b>Costa Rica</b>		100.0		171.0		71.0	
	self-employed agric	100.0		171.0		71.0	
	employers agric	97.1	-2.9*	164.8	-6.2	67.7	-3.3*
	employee agric	74.4	-25.6	176.0	4.9	101.6	30.5
	self-employed not agric	93.9	-6.1	175.2	4.1	81.3	10.3
	employers not agric	83.3	-16.7	165.1	-6.0	81.8	10.7
	employee not agric	81.6	-18.4	177.7	6.7	96.2	25.1
desempleados /nlf	91.4	-8.6	183.1	12.1	91.8	20.7	
<b>Guatemala</b>		100.0		92.0		-8.0	
	self-employed agric	100.0		92.0		-8.0	
	employers agric	62.6	-37.4	100.6	8.6	38.0	46.0
	employee agric	74.4	-25.6	69.7	-22.3	-4.7*	3.3*
	self-employed not agric	76.9	-23.1	68.0	-24.0	-8.9	-0.9*
	employers not agric	79.9	-20.1	56.9	-35.1	-23.0	-15.0
	employee not agric	68.5	-31.5	59.6	-32.4	-8.9	-0.9*
desempleados /nlf	74.1	-25.9	85.9	-6.1*	11.8	19.8	
<b>Honduras</b>		100.0		82.2		-17.8	
	self-employed agric	100.0		82.2		-17.8	
	employers agric	87.4	-12.6	100.0	17.8	12.6	30.3
	employee agric	73.0	-27.0	80.2	-2.1*	7.1*	24.9
	self-employed not agric	79.8	-20.2	83.9	1.6*	4.1*	21.8
	employers not agric	74.4	-25.6	82.1	-0.1*	7.7*	25.5
	employee not agric	79.2	-20.8	78.8	-3.4*	-0.4*	17.4
desempleados /nlf	82.6	-17.4	101.9	19.6	19.3	37.0	

**Table 9c (cont). Relative differences in consumption inequality and evolution of the differences among rural households groups in Latin-American countries.** Source: Author's calculations based on household survey data provided by the World Bank.

Country	Group	Gini of income					
		1994	D <sub>sea0</sub>	2002	D <sub>sea1</sub>	D <sub>t</sub>	D <sub>sea1</sub> -D <sub>sea0</sub>
<b>Mexico</b>		100.0		112.6		12.6	
	self-employed agric	100.0		112.6		12.6	
	employers agric	100.3	0.3*	129.3	16.7	29.0	16.3
	employee agric	81.4	-18.6	69.2	-43.5	-12.2	-24.8
	self-employed not agric	87.4	-12.6	77.4	-35.2	-10.1	-22.7
	employers not agric	105.7	5.7*	74.7	-37.9	-31.0	-43.6
	employee not agric	74.3	-25.7	103.8	-8.8*	29.5	16.9
desempleados /nlf	84.7	-15.3	94.1	-18.5	9.4	-3.2*	
<b>Nicaragua</b>		100.0		74.7		-25.3	
	self-employed agric	100.0		74.7		-25.3	
	employers agric	111.3	11.3	103.7	28.9	-7.6*	17.7
	employee agric	76.7	-23.3	61.0	-13.7	-15.7	9.5
	self-employed not agric	88.6	-11.4*	69.9	-4.9*	-18.7	6.6*
	employers not agric	0.0	-100.0	96.3	21.5	96.3	121.5
	employee not agric	74.5	-25.5	66.5	-8.3	-8.0*	17.3
desempleados /nlf	95.8	-4.2*	79.0	4.3*	-16.8	8.5*	
<b>Paraguay</b>		100.0		99.9		-0.1*	
	self-employed agric	100.0		99.9		-0.1*	
	employers agric			149.6	49.7	149.6	49.7
	employee agric	84.1	-15.9	75.5	-24.4	-8.6*	-8.5*
	self-employed not agric	103.4	3.4*	67.0	-32.8	-36.3	-36.2
	employers not agric	110.6	10.6*	74.2	-25.7	-36.5	-36.3
	employee not agric	60.4	-39.6	64.8	-35.1	4.4*	4.6*
desempleados /nlf	83.5	-16.5	75.2	-24.6	-8.3*	-8.1*	
<b>Peru</b>		100.0		70.0		-30.0	
	self-employed agric	100.0		70.0		-30.0	
	employers agric			80.8	10.8	80.8	10.8
	employee agric	69.4	-30.6	56.0	-14.0	-13.4	16.6
	self-employed not agric	78.8	-21.2	69.5	-0.5*	-9.2	20.8
	employers not agric			68.7	-1.3		
	employee not agric	70.8	-29.2	71.8	1.8*	1.1*	31.1
desempleados /nlf	86.2	-13.8	67.8	-2.2*	-18.4	11.6	

Base 100 self-employed agric at first year: Nicaragua 0.59, Paraguay 0.55, Peru 0.55

Significance test based on bootstrap standard errors (n. reps. = 100)

\*Indicates difference not statistically significant at 5%

Source: Author's calculations based on household survey data provided by the World Bank.

Some remarks:

- Similar proportion of countries reducing and increasing income inequality among small farmers.
- All kind of development patterns for small farmers.
- Chile and Nicaragua are the only countries exhibiting overall economic development for small farmers, characterized by increasing income and poverty and inequality reduction for this group.
- Countries like Guatemala and Honduras have improved income equality but lowering average income of small farmers.

- Countries like Colombia and Mexico show a pattern of economic un-development for small farmers, lowering income and increasing poverty and inequality of household self-employed in agriculture.
- Different patterns regarding evolution of equality gaps among countries and groups. In general, there is an inequality reversal of small farmers respect to not agriculturally based households, initially showing more inequality and less at the end of the period. A remarkable exception is Mexico, where inequality gaps have been increasing in time.