

## Final NTA estimates El Salvador 2010

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## 1. Background



### NTA and El Salvador

- El Salvador joined the NTA network in 2011
- The key institution Dr. Guillermo Manuel
   Ungo Foundation
- The NTA flows have been measured for 2010
- Preliminary accounts 

  November of 2012
- Since then the accounts have been under revision



## National accounts

- Challenge: System of national accounts of El Salvador is based on the SNA 68 manual
- Issues: → Economic integrated accounts have not been estimated since 1990
- No separation of mixed income



## 2. CUADRO ECONOMICO DE CONJUNTO - 1990 (EN MILES DE COLONES)

G A S T O S									CUENTAS	INGRESOS										
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5,001		30,381	2,095	2,157	153,074	4,041,000		4,233,798	Otres Transferencies	C			3,589,874			630,062	13,862		4,233,7	
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80,760	-34,700	-50,000		1	61,909			87,977	Variación de Existencias	Ĉ			1					87,977	87,6	
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## National accounts of El Salvador

- Solution → Use the Economic Integrated Accounts of Guatemala (Proportions) to complete the data
- Why Guatemala? → The most similar economy, based on the complexity of exportations (Amaya and Cabrera, 2013)



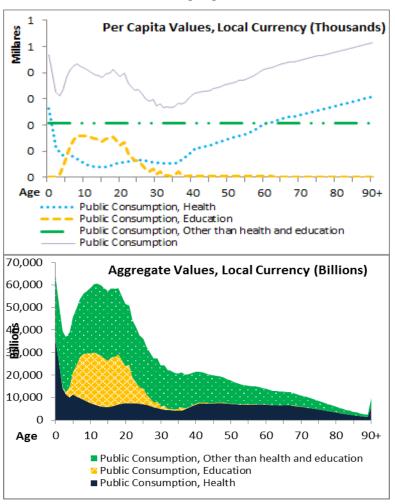
## Other data sources

- Macroeconomic: Administrative records → Ministry of finance, Ministry of Health, Ministry of Education
- Microeconomic: Household surveys
   Household survey of Multipurpose and National Health Survey

#### 3. Lifecycle deficit: Public Consumption



## El Salvador, public consumption 2010

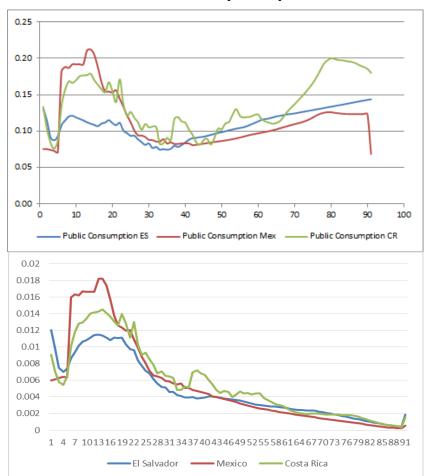


- → Average per capita public consumption is higher in the first and final ages
- → However, aggregate values differ and reflect the young population structure
- → Of every 10 dollars in public consumption, 4.7 dollars is going to age group 0-19 and 0.9 is going to 64+ age group
- → However, aggregate public consumption on education more concentrated on first ages and aggregate public consumption on health in final ages

#### 3. Lifecycle deficit: Public Consumption



## EL Salvador (2010), Costa Rica (2004) and Mexico (2004)



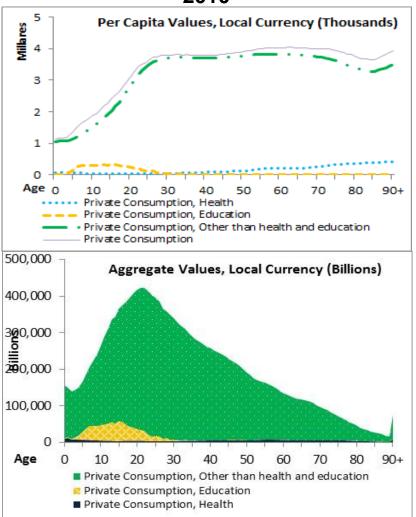
Pena and Rivera (2016), Rosero-Bixby and Robles (2008) and Mejia-Guevara (2008)

- → Costa Rica and Mexico devotes more public resources to satisfy the needs of the first and final ages compared to El Salvador
- → In fact, El Salvador is one of the NTA countries in LAC that devotes less public resources to the first ages

## 3. Lifecycle deficit: Private Consumption



## El Salvador, private consumption 2010

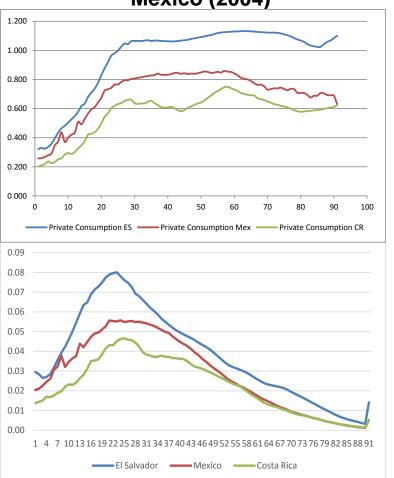


- → Average private consumption grows as individuals transit from first ages to productive ages (More YL)
- → Other type of private consumption is the major component of private consumption
- → Private consumption on education helps to compensate low public consumption on education, mainly in higher education
- → Of every 10 dollars, 6.2 going to 20-64 age group (differs with public consumption patterns)

#### 3. Lifecycle deficit: Private Consumption



EL Salvador (2010), Costa Rica (2004) and Mexico (2004)



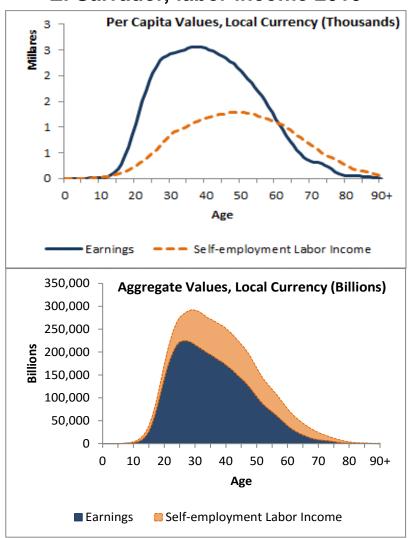
- Similar trends in Mexico and Costa Rica
- → The maximum of private consumption is reached at age of 62 in El Salvador, 57 in Costa Rica and 56 in Mexico
  - → Private consumption bigger in El Salvador, hint: Remittances and consumption patterns

Pena and Rivera (2016), Rosero-Bixby and Robles (2008) and Mejia-Guevara (2008)

#### 3. Lifecycle deficit: Labor income

# Funda Ungo

#### El Salvador, labor income 2010

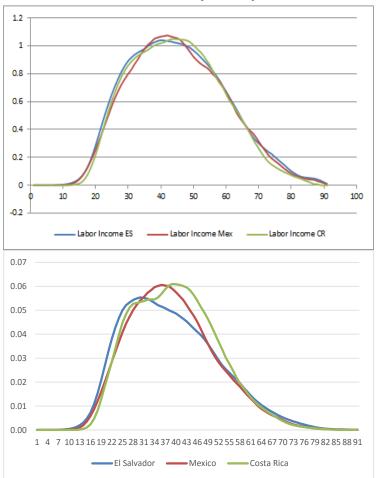


- → The maximum level of average earnings is reached at the age of 37 years.
- → The maximum level of average selfemployment labor income is reached at the age of 50 years.
- → The informal sector represents an important source of income for individuals older than 50 years of age
- → In the urban areas the informal employment represented 49.7% of the total employment in 2010.

#### 3. Lifecycle deficit: Labor income



## EL Salvador (2010), Costa Rica (2004) and Mexico (2004)



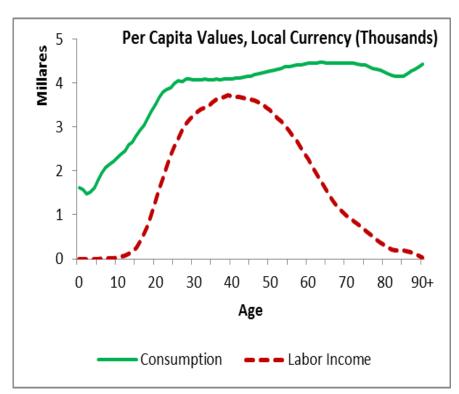
Pena and Rivera (2016), Rosero-Bixby and Robles (2008) and Mejia-Guevara (2008)

- → The average labor income presents a similar pattern in El Salvador, Mexico and Costa Rica
- → However, the aggregate values show that Mexico and El Salvador have q younger population structure than Costa Rica
- → In addition, the informal sector is bigger in El Salvador and Mexico than in Costa Rica

## 3. Lifecycle deficit



#### El Salvador, Lifecycle deficit 2010



Source: Pena and Rivera (2016)

- → Life cycle deficit is always positive. At the moment, this is a characteristic that no other NTA country possesses.
- → This behaviour can be mainly explained, in part, through remittances, which in 2010 represented approximately 16.2% of the GDP
- → Remittances in other NTA countries in 2010:

Jamaica: 15.4 %

Senegal: 11.4 %

Philippines: 10.8%

Mexico: 2.1%

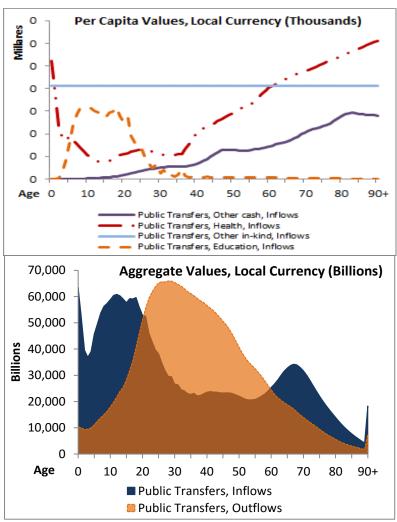
## 3. Lifecycle deficit



- → It is estimated that in 2010, households that received remittances spent around 90% of them in consumption (MINEC, 2010)
- → This fact impacted the macroeconomic accounts resulting in a final consumption that represented 103% of the GDP in 2010
- → UNPD has estimated that in 2009 El Salvador was the third country in the World with the biggest proportion of consumption to GDP (UNPD, 2010), just behind of Lesotho and Liberia

#### 4. Public transfers: inflows

#### El Salvador, public transfers inflows 2010



Source: Pena and Rivera (2016)

- final stages of the life cycle. → Of every 10 dollars, 3.8 going to the age group 0-19, 4.3 to the age group 20-64 and 1.9 to age group 64+
- → Average public transfers in education are mainly directed to the first ages

→ Average and aggregate public transfers

are mainly targeted to the first and the

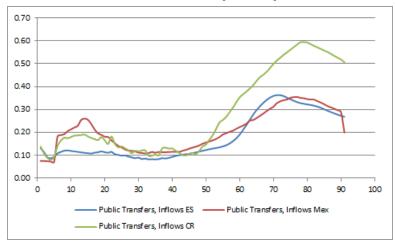
→ Public transfer in health and other cash are mainly targeted to the final ages

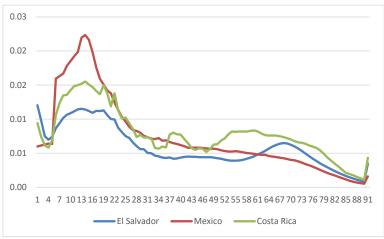


#### Public transfers: inflows



## EL Salvador (2010), Costa Rica (2004) and Mexico (2004)





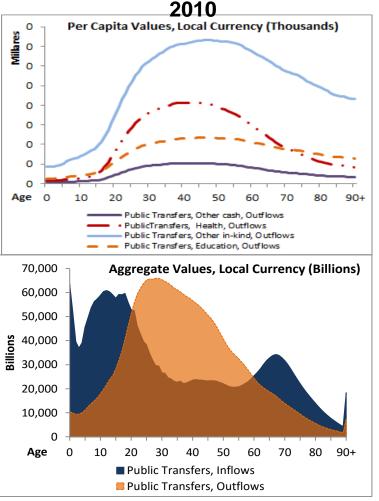
Pena and Rivera (2016), Rosero-Bixby and Robles (2008) and Mejia-Guevara (2008)

- → Compared to Costa Rica, in El Salvador and Mexico individuals in the final stage of the life cycle relies less on public transfers
- → In El Salvador there is q low coverage of pensions for people in the last ages, in fact, it is estimated that just one of every 6 individuals older than 60 years has access to pension (Cordova et al, 2010)

#### 4. Public transfers: outflows



El Salvador, public transfers outflows

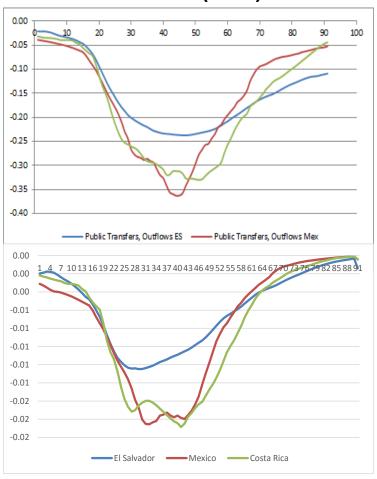


- → Average and aggregate public transfers outflows rely heavily on productive ages
- → This is related to the fact that the tax structure relies on labor income and private consumption
- → Compared with other expenses, the outflows are more targeted to funding other transfers in kind, followed by health and education

#### 4. Public transfers: outflows



## EL Salvador (2010), Costa Rica (2004) and Mexico (2004)



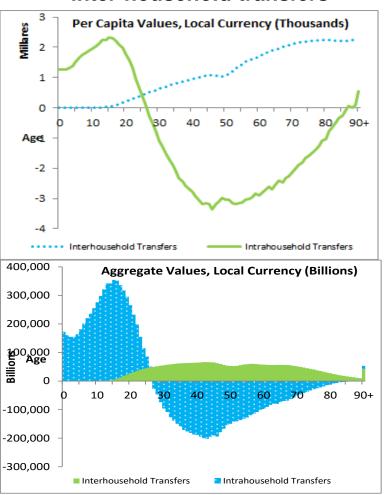
Pena and Rivera (2016), Rosero-Bixby and Robles (2008) and Mejia-Guevara (2008)

→ Compared with Costa Rica and Mexico, the outflows of public transfers represents less of the average labor income of those in in the age group 20-39, this has to do with the public finance structure of El Salvador

# 5. Private transfers: Intra and Inter-household transfers



## El Salvador, intra-household and inter-household transfers

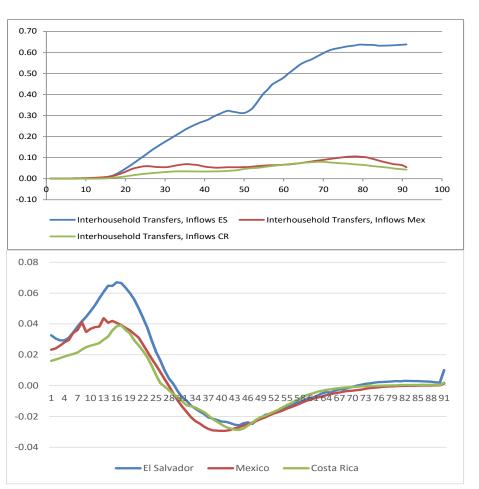


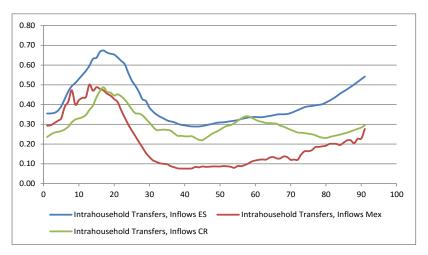
- → Remittances were included as part of inter-household transfers due to the fact that the majority of workers abroad are not guest workers
- → The shape of inter and intra-households transfers curves shows the effect of remittances in the support mechanisms and it provides evidence that they are behind the positive life cycle deficit
- → The inter and intra-household resources are mainly targeted to funding other consumption than education and health

# 5. Private transfers: Intra and Inter-household transfers



**EL Salvador (2010), Costa Rica (2004) and Mexico (2004)** 





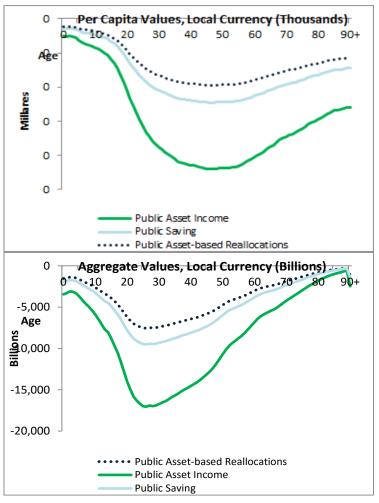
→ The aggregate values show that remittances allow to obtain a more positive private transfers at the beginning and at the end of the life cycle

Pena and Rivera (2016), Rosero-Bixby and Robles (2008) and Mejia-Guevara (2008)

#### 6. Public asset based reallocations



## El Salvador, public asset reallocations

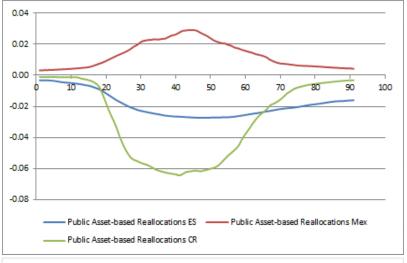


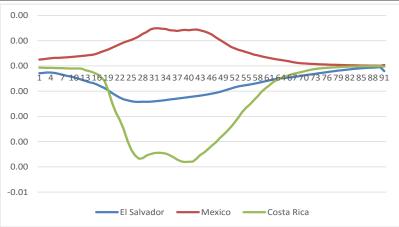
- → The public asset based reallocations are negative as are the public asset income and the public saving
- → The public asset income are negative mainly due to the net payment of interests and the negative net property income.

#### 6. Public asset based reallocations



EL Salvador (2010), Costa Rica (2004) and Mexico (2004)





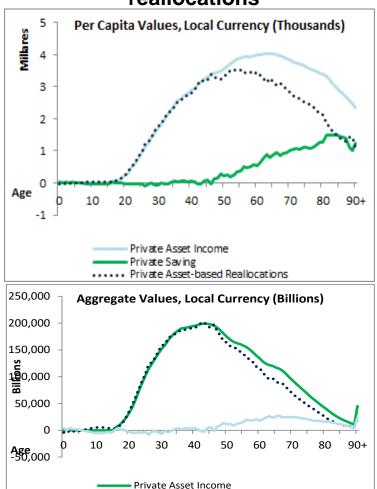
Pena and Rivera (2016), Rosero-Bixby and Robles (2008) and Mejia-Guevara (2008)

- → The public asset based reallocation of El Salvador are a bit similar to the public asset based reallocations observed in Costa Rica
- → As said, the people in the productive ages is paying for the debt acquired by other generations and this raise the issue of intergenerational debt burden:

#### 7. Private asset based reallocation



## El Salvador, private asset reallocations



Private Asset-based Reallocations

- → The average and aggregate private savings increase as the final stages of the lifecycle are reached.
- → The private asset profile tend to decrease at the final stages of the life cycle

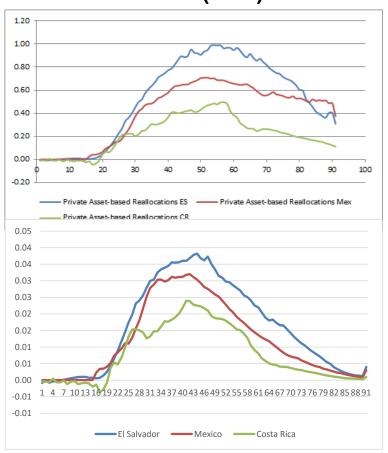
Source: Pena and Rivera (2016)

**Private Saving** 

#### 7. Private asset based reallocation



EL Salvador (2010), Costa Rica (2004) and Mexico (2004)



Pena and Rivera (2016), Rosero-Bixby and Robles (2008) and Mejia-Guevara (2008)

- → when compared to Costa Rica and Mexico the relative importance of this reallocations is bigger in El Salvador.
- → This may be related with the economic impact of remittances, but more study on this is needed.
- → . However, it is important to point out that "It is important to remember, however, that these are overall averages [NTA profiles]" and as in Brazil and Mexico and other LAC countries it is highly unlikely "that asset income is an important source of support fro the poor" (NTA, 2011).

#### 8. Conclusions



- → The SNA 68 framework was an important challenge for the national team
- → The lack of the integrated economic accounts was an important issue to solve.
- → The positive Life-cycle deficit is explained by the impact of remittances
- Remittances are channelled through interhousehold and intra-household transfers to fund mainly other consumption