

A time series of generational accounts for Hungary

Gal, RI, Valentiny, A

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Structure of presentation:

- Indicators produced by GA
- GA for specific programs and for the general government; GA-equivalent indicators
- Oscillating sustainability: a measure of political maturity:
 - a time series of GIs for Hungary, 1992-2008
 - a time series of GPIs for Hungary, 1992-2001

A taxonomy of indicators

(inspired by Fenge and Werding, 2005)

Indicators in a 4-way table						
		cross-section	remaining lifetime		entire lifetime	
			cohort	population	cohort	population
specific programs	gross	benefit generosity ratios	pension wealth, contribution wealth			
	net		net pension wealth; net present value	implicit pension debt , implicit health investment, implicit education investment		
general government	gross					
	net		generational imbalance	sustainability gap	net transfer rate	
GDP/NNI	gross					
	net	directions of net flows; time series of average ages; lifecycle-adjusted population dependency ratio		consumption deficit, savings gap, fertility gap, HC investment gap	life-cycle wealth	
total economic activities (GDP+household economy)	gross	intergenerational tax rate				
	net				full cohort net present value	

The intertemporal budget constraint

$$\sum_{s=0}^D M_s + \sum_{j=1}^{\infty} M_j - \sum_{t=0}^{\infty} G_t u^t + W = 0$$

Generational imbalance:

difference between the per capita net tax of the newborn cohort payable over the remaining lifetime and that of future generations

Sustainability gap:

$$\sum_{s=0}^D M_s + \frac{1}{v} \sum_{j=1}^{\infty} M_j - \sum_{t=0}^{\infty} G_t u^t + W = SG$$

Implicit pension debt (Holzmann, Palacios and Zviniene 2004)

IPD1: the amount of eligibilities collected up to the date of measurement

IPD2: the aggregate net contributions of current pensioners and contributors through their remaining lifetime

IPD3: the aggregate net contributions of current as well as future pensioners and contributors

Equivalent of IPD2 in GA: $\sum_{s=0}^D M_s$

In GA exercises limited to the PAYG pension system, GI strongly correlates with IPD2.

Equivalent of IPD3 in GA: $\sum_{s=0}^D M_s + \frac{1}{v} \sum_{j=1}^{\infty} M_j = SG - \sum_{t=0}^{\infty} G_t u^t + W$

In GA exercises limited to the PAYG pension system, SG strongly correlates with IPD3.

Generational imbalances in the Hungarian pension system, 1992-2008, billion 2009 Ft ($g=1.5$, $r=2.0$)



Generational imbalances in the Hungarian general government, billion 2009 Ft ($g=1.5$, $r=5.0$)

