



A Human Capital Account

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Why is human capital (HK) not part of national accounting?

Like physical capital HK is capital:

- created by investment
- provides returns in the future

Unlike physical capital it is inalienable from its carrier

- it cannot be deposited, transferred, sold or bought
- there are labor markets but there are no markets for human capital

Consequences

- physical capital is valued by supply and demand, but human capital is not
- accounting standards have to imitate what otherwise market actors would do

Two main approaches in HK measurement:

- Income approach: value of HK is the present value of expected labor income through the remaining lifetime (Jorgenson and Fraumeni 1989)
- Cost approach: value of HK is the amount spent on its production (Kendrick 1976)
- Equivalents of the two approaches are established practices in the accounting of physical capital as well
- In principle, market mechanisms assure that the two approaches produce similar results

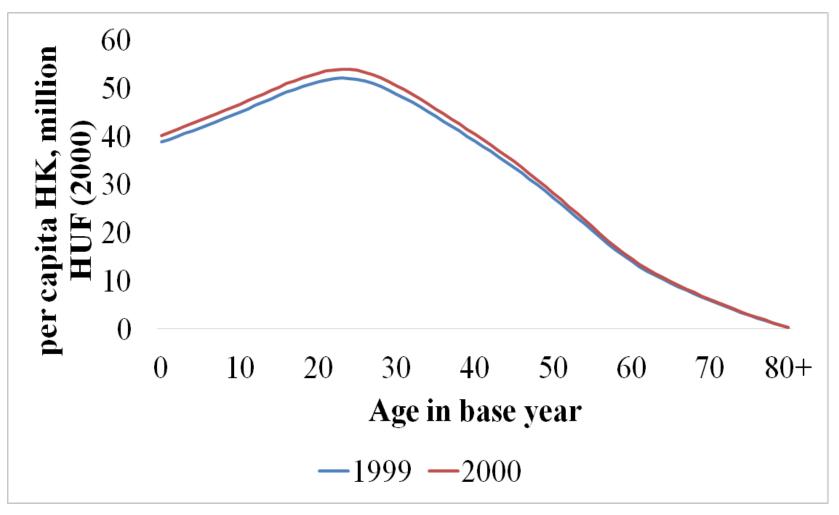
A scheme of the accounting period

		NA main categories	NTA categories	
t_{0}				t_{1}
	flow transa ctions	II.1 Generation of income and allocation of primary	labour income,	
		income	asset income	
		II.2 Secondary redistribution of income	autic tucasfous	
		II.3 Redistribution of income in kind	public transfers	
		II.2b Tertiary redistribution of disposable income	private transfers	
		within and between households		
		II.3b Redistribution of disposable income in kind		
		within and between households		
	II. 4 Use of disposable income		saving	
			consumption	
			HK investment	
wealth				wealth
(K , HK)				(K, HK)

We need an estimation for the value of the HK stock as well as the value of HK investment:

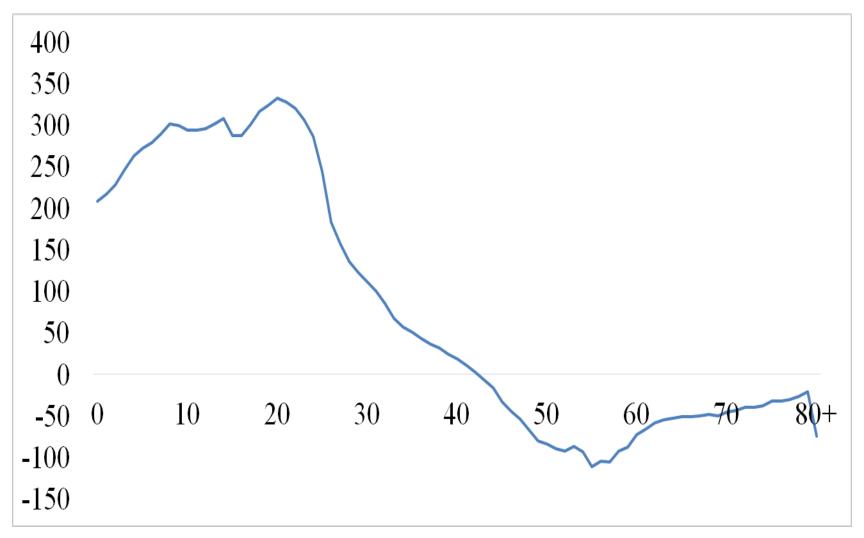
- HK stock is measured by the prospective (income) method
- HK investment is measured by the retrospective (cost) method

Per capita HK by age, Hungary



Source: Authors' calculation

Changes in per capita HK by age 1999-2000, Hungary



Source: Authors' calculation

How to distinguish between consumption and HK investment

Gu and Wong (2010):

- consumption if the benefits of the expenditure are realized in the same accounting period as the spending occurred
- HK investment if the benefits are realized in the future

What is HK investment?

Modified Kendrick-list:

- total consumption by children (raising a child as building a factory)
- the value of the time of children

Some estimation results and the problem of short term – long term

	1999	2000			
r		0,040	(real rate of return on 2-weeks gov loan)		
g		0,025	(growth of real labour productivity per hour worked)		
GDP		13 310	(billion HUF)		
HK	329 530	340 289			
HK growth		10 760			
HK growth, working age		-740			
HK growth, children		7 181			
HK growth, entry of new cohort		4 319			
C, children		3 386	(incl. C of unpaid HH labor)		
value of time, children		6 669			

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