

Abstract.  
August 27 2009

IARIW 31<sup>st</sup> general conference – St Gallen Switzerland  
August 22 – 28 2010

**Contributed paper.**

Title: Balance-sheets. A financial approach.

Author: Bo Bergman, Sweden

E-mail: [bo.m.bergman@gmail.com](mailto:bo.m.bergman@gmail.com)

**Summary**

*Macroeconomic theory and modeling are based almost entirely on economic transactions. In macroeconomic analysis, balance sheets are often neglected. This circumstance may have contributed to why the pace of the financial crisis has been so surprisingly fast and strong. The exceptional changes in the sector balance sheets in recent years, particularly in the financial and non-financial corporate sectors, but also in the households sector, the government sector and the international investment position (IIP) have not been paid enough attention among analysts.*

*Traditionally national wealth and sector balance sheets statistics are provided within the framework of national and financial accounts. Non-financial assets are usually calculated with some kind of perpetual inventory method or corresponding. The calculations often involve different price and volume estimates. Information on intangibles are often missing or incomplete. The coordination of financial and non-financial assets imposes problems of inconsistency. The results are however very useful for many relevant analyses. But, there are some serious limitations: corporation's net worth is a dubious concept and the timeliness is often not satisfactory.*

*This paper introduces an additional alternative to the traditional national wealth and sector balance sheets accounting. The alternative approach can be seen as a statistical framework and/or macro economic model that illustrates economic assets and liabilities in the economy. Briefly the framework/model combines the financial and so called real economy and also naturally integrates holding gains with direct return on capital. The main characteristics of the framework/model are the following:*

- 1. All assets and liabilities are valued at market value (corresp.)*
- 2. Final owners (households and government) can only possess financial assets. They cannot directly own non-financial assets (as is the case with foreign assets in current BOP/SNA)*
- 3. Corporation's net worth is eliminated and allocated to it's owners.*

Abstract.  
August 27 2009

4. *All non-financial assets are being owned by a new intermediate owner sector (an extended corporate sector). Valued at market value.*
5. *The total market value of all non-financial assets (tangibles and intangibles) is residually calculated.*

*The model provides some new macroeconomic aggregates and ratios. However it is not the intention at this early stage to evaluate the relevance of the measures or to put them in a coherent theoretical framework. Bearing this reservation in mind the existence of three kinds of capital with regard to direct return of capital can be identified – interest bearing capital, owners capital and national capital (the latter generating operating surplus). Further, for each of the capital categories holding gains can be added so that a lot of return of capital ratios can be compiled.*

*A major weakness of the framework/model may be the consequent market valuation of assets and liabilities at current prices and that the “market value” estimates of non-market assets in some cases are rough and uncertain. Further it should be observed that the magnitude of some statistical aggregates is quite large. (numerical values amount up to ten to fifteen times GDP).*

*However a great advantage compared with the traditional national wealth calculation is the timeliness and that the basic matrix can be rather easily compiled. In Sweden it should be possible to provide a preliminary set of quarterly data approximately three to four months after the reference period/date.*

**Example Sweden December 2006. Trillion SEK**  
(to be updated: 2008 or 2009)

Closing balance	Intermed	Final	TOTAL		
	owners “CORP”	owners GOV	HH	ROW	
<b>Fin. assets, interest-bearing</b>	11,84	1,11	3,40	4,35	20,70
<b>Quoted shares</b>	2,76	0,63	0,77	1,52	5,68
<b>DI and unquoted shares</b>	3,16	1,30	5,69	2,53	12,68
<b>Total</b>	14,60	3,04	9,86	8,40	39,06
<b>Liabilities, interest-bearing</b>	13,38	1,66	1,99	3,67	20,70
<b>Quoted shares</b>	4,08			1,60	5,68
<b>DI and unquoted shares</b>	9,52			3,16	12,68
<b>Total</b>	26,97	1,66	1,99	8,43	39,06
<b>Net liabilities..</b>	12,37	1,39	7,86	-0,3	0
<b>..= total non-financial assets</b>	12,37				

*Explanations:*

Abstract.

August 27 2009

- *The intermediate owners sector include all legal corporations but also imputed corporate units in their capacity as owners of direct investment capital (foreign and domestic).*
- *Interest-bearing assets and liabilities include also zero-interest instruments like notes, trade credit and other accounts receivable/payable.*
- *Direct investment capital, DI, include both foreign direct investment and domestic direct investment, the latter corresponding to non-corporate sectors legal owning of non-financial assets (mainly real estate)*

*Before presenting the model in detail and before showing some results for Sweden, a theoretical background and description will follow.*

A COMPLETE DOCUMENT (ABOUT 15 - 20 PAGES) IS AVAILABLE IN SWEDISH.

THE CURRENT ENGLISH VERSION IS A SUMMARY FOLLOWED BY DRAFT HEADINGS

IF OF INTEREST AND IF NEEDED A FULL ENGLISH TRANSLATION WILL BE AVAILABLE AS WELL AS AN UPDATING OF RESULTS (2009/ Q1 2010)

**Draft Headings**

**Balance-sheets. A financial approach.**

***Summary***

***1. Background, theory***

***1.1 Flows and stocks***

***1.1.1 Weak interest for balance-sheets***

***1.1.2 Holding gains – problems in theory and in practice***

***1.1.3 The financial crisis increases interest for balance-sheets***

***1.2 Capital – two different aspects***

***1.2.1 Economic assets risks, ownership***

***1.2.2 Consumption or capital formation?***

***1.2.3 Capital is the present value of economic benefit***

***1.2.4 Risk belongs to the owner***

***1.3 Institutional units, sectors – final and intermediary owners***

***1.4 National wealth and institutional sector balance-sheets***

***1.4.1 The corporate sector according to national accounts and to business economy***

***1.4.2 Balance sheets in the financial accounts***

***1.4.3 The international investment position in BOP***

***2. The alternative approach***

Abstract.  
August 27 2009

## **2.1 Theory**

***2.1.1 Consequent market valuation***

***2.1.2 Corporations net worth is eliminated***

***2.1.3 It's all financial***

***.. as in the balance of payments***

**2.2 The basic matrix**

**2.3 Return on capital**

***2.3.1 Different kinds of capital – different kinds of return***

**2.4 Results, analysis**

## **APPENDIX**

**Calculations, methods**