Statistics Denmark ECONOMIC MODELS

Michael Osterwald-Lenum

Working paper* April 27, 2017¹

Pension figures for Denmark

Abstract:

This paper clarifies the causes of divergences between figures on pensions from OECD publications and those provided to the IMF from ADAMs pension databank.

eMOL27417

Keywords: pensions

The present paper is in a series of internal working papers from the division of Economic Models. Conclusions drawn in the papers are not final and may be/have been changed before newer versions of ADAM are defined.

Latest revision: April 27, 2017. Version v0r03. Finalised 2017.11.29.

1. Introduction

Recently staff at the IMF² have pointed to differences between pension figures for Denmark provided directly to the IMF from ADAM's pension databank, and those displayed in OECD publications.

In particular the divergence is that pension assets to GDP is reported at 205.9 percent for 2015 in an OECD publication, which is much different from the figures which were provided to the IMF from ADAMs pension databank earlier this year. From the latter figures the same percentage is 168.7, a difference of 37.2 percent, a rather substantial difference.

The paper presents observations, results of a quick investigation and some conclusions.

2. Data for Denmark in OECD-publications

The OECD publication "OECD Pensions Outlook 2016" presents some graphs on pension assets for different countries, figure 1.3, on pages 24-27.

On page 27 there is a link to a downloadable MS-Excel-spread sheet.

From that spread sheet the following table is an excerpt for Denmark covering the years 2011-2015.

Table 1 OECD	pension figure	s for Denmark	x, 2011-2015
--------------	----------------	---------------	--------------

			Assets (millions of national currency)				
			2011	2012	2013	2014	2015
Denmark	Occupational	DB	53,019	57,381	52,661	59,433	59,821
Denmark	Occupational	DC	2,886,718	3,102,365	3,083,392	3,532,434	3,576,404
Denmark	Personal	DC	401,303	440,638	442,680	422,894	452,035
Note: OECD Pensions Outlook 2016, associated spread sheet "212016041p1g003.xlsx".							

This fortunately this OECD practice makes the investigation of the sources of the presented data much quicker.

3. Data for Denmark from the Financial Supervisory Authority (in Danish: "Finanstilsynet")

Data from FSA is provided online from its website. Aggregate data for 2011-2015 are provided as MS-Excel spread sheets.³

Table 2 FSA data for Denmark on financial institutions, 2011-2015

² Yi Xiong.

³ https://finanstilsynet.dk/~/media/Tal-og-fakta/2016/Statistik/Hovedtal-2015-xls.xls?la=da.

		2011	2012	2013	2014	2015
Balance i mio. kr.	Balance sheet total in million DKK					
Livsforsikringssel- skaber	Life-insurance companies	1,496,225	1,681,570	1,756,780	2,013,190	2,074,072
Tværgående pensi- onskasser	Lateral pension funds	555,614	565,033	585,232	646,091	671,570
Firmapensionskasser	Company pension funds	53,019	57,381	52,661	59,433	59,821
ATP, LD og AES	ATP, LD and AES	842,201	860,242	745,324	877,318	834,807
Sum excl.	Company pension funds	2,894,040	3,106,846	3,087,336	3,536,599	3,580,449

Note: Excerpt from FSA-spread sheet "Hovedtal 2015 xls.xlsx", sheet "Table 2.1 (Table 2.1)". The last row has been added for easy reference to those figures in this paper.

The figures drawn from the FSA-website cover the balance sheet totals of a number of financial institutions.

In Table 2 only figures for those institutions which are relevant to the OECD table has been included. For easy reference the table also includes a row with a sum of the balance sheet totals of all other institutions than the company pension funds.

4. Data for Denmark from ADAM's pension databank

l alt	Total	2,733,142	2,997,477	3,030,872	3,293,179	3,420,358
Wpcr_DMP	Midlertidige pensionsfond	-	-	-	-	-
Wpcr_SP	Særlig Pensionsfond	-	-	-	-	-
Wpco_LD	Lønmodtagernes dyrtidsfond	51,574	52,486	53,374	54,576	44,423
Wpcr_ATP	АТР	579,321	624,132	592,566	704,423	705,214
Wp_f	Private pension institutions	1,703,392	1,882,632	1,939,927	2,110,313	2,223,560
Wp_b	Commercial banks and savings banks	398,855	438,227	445,005	423,867	447,162
	Pension assets of households with:					
		2011	2012	2013	2014	2015

Table 3 ADAMs pension data for Denmark, 2011-2015

Note: Data extracted from ADAM's pension databank, ADBK0417. All figures are millions of Danish kroner.

Table 3 covers the pension figures from ADAM's pension databank. For easy reference the ADAM-variable names are included.

The pension figures in ADAM's pension databank are measured as the households' pension assets held with the different pension administrators. These figures match the pension liability of the respective pension administrators. For this reason the figures of Table 3 are smaller than the comparable figures of Table 2.

5. Comparison of pension figures

Comparing table 1 and 2 it is rather obvious that the OECD figures for "Occupational DB" in table 1, line 1, is identical with the balance sheet total for the socalled company pension funds in table 2, line 3.

Also the sum of the remaining rows of table 2 very closely matches the OECD figures of Table1, line 2.

The preliminary conclusion is that the OECD has measured pension assets (of households) by the balance sheet total of the pension administrators. Thus any non pension liability of the pension administrator has not been subtracted.

Table 3 presents data for household pension assets held with banks as the only extra coverage, not included in Table 2. Actually line 2-4 cover exactly the same pension administrator institution (except the very small AES).

The difference between the figures of Table 3 and of Table 2 is that in Table 3 only the households' pension assets with the administrators are included, whereas in Table 2 those pension administrators total balance sheet is counted.

The pension assets of households held with banks in cluded in Table3, line 1, are very close to the line 3 of Table 1.

6. Versions of GDP figures for 2015 for Denmark

Each time new figures are released for GDP the specific value may change. In Table 4 the different available figures are presented.

version	GDP for 2015	released		
adbk0516	1 985 837.84	March 31, 2016		
adbk0616	1 985 347.25	June 30, 2016		
adbk1116	2 027 170.94	Nov. 15, 2016		
adbk0417	2 027 170.94	March 31, 2017		
Notes all figures and in willians of Danish know on				

Table 4 Revisions of GDP for Denmark for 2015

Note: alle figures are in millions of Danish kroner.

7. Pension assets to GDP for 2015 for Denmark

Table 5 Pension assets to GDP for 2015 different versions

GDP versions	March 31,2016	June 30, 2016	Nov. 15, 2016 ->
ADAM's pensions/GDP	1.7224	1.7228	1.6873
OECD-PensionTotal/GDP	2.0587	2.0592	2.0167

8. Conclusion

The paper has established that the causes of differences between the pension figures provided from ADAM's pension databank to the IMF and those presented in OECD publications and databases rest on two important differences:

OECD pension figures are balance sheet totals for pension administrators, except for those held by banks.

Those from ADAM's pension databank are the sum of households' pension assets with different pension administrators, corresponding to the pension liabilities of those same pension administrators.

The difference being any debt of pension administrators included in their balance sheet which over this period has been noticeble if not substantial.

Also the OECD uses a GDP figure which dates *before* the major GDP-revision release in the autumn of 2016.

Depending on which figures are available for other countries the one or the other may be relevant for comparison purposes.

But for the measurement of the pension assets of housholds (Danish or Foreign) with Danish pension administrators the figures from ADAM's pension databank are the more appropriate.

Postscript

From ADAM's databank the estimate of foreign households' pension assets with Danish pension admnistrators for 2015 is 19 014 million Danish kroner.⁴

References

Finanstilsynet/Danish Financial Supervisory Authority:

- "Hovedtal 2015", online publication (from www.finanstilsynet.dk)

OECD:

"OECD Pensions Outlook 2016", Paris, 2016.

⁵

⁴ Defined with ADAM's variables: wp_cf_e + wcp_cf_e.