

7th Meeting of the Advisory Expert Group on National Accounts, 23-25 April 2012, New York

Agenda item: II

**ISSUES NOTE: CONSUMPTION OF FIXED CAPITAL ON MILITARY EXPENDITURES AND
THE DEFINITION OF CATASTROPHES IN THE MEASUREMENT OF NON-LIFE
INSURANCE**

ISSUES NOTE: CONSUMPTION OF FIXED CAPITAL ON MILITARY EXPENDITURES AND THE DEFINITION OF CATASTROPHES IN THE MEASUREMENT OF NON-LIFE INSURANCE

INTRODUCTION

1. At the OECD Workshop on the implementation of the 2008 SNA, issues were raised in relation to the recording and measurement of consumption of fixed capital on military expenditures and the definition of catastrophes in the measurement of non-life insurance. This issue note shortly describes the related problems. The AEG is requested to provide further advice on both issues.

CONSUMPTION OF FIXED CAPITAL ON MILITARY EXPENDITURES

2. One of the more significant changes from the 1993 SNA relates to the recording of expenditures on military weapons systems as gross fixed capital formation, instead of intermediate consumption. Military weapons systems comprise of "... vehicles and other equipment such as warships, submarines, military aircraft, tanks, missile carriers and launchers, etc." (2008 SNA, para A3.55). The relevant expenditures are considered as being "... used continuously in the production of defence services, even if their peacetime use is simply to provide deterrence" (para. A3.55). Furthermore, "single-use items, such as ammunition, missiles, rockets, bombs, etc., delivered by weapons or weapons systems are treated as military inventories. However, some single-use items, such as certain types of ballistic missiles with a highly destructive capability, may provide an ongoing service of deterrence against aggressors and therefore meet the general criteria for classification as fixed assets". (para. A3.56).

3. As a consequence of the above change, intermediate consumption of general government will decrease and consumption of fixed capital will increase. The impact on government output will depend on the difference between both items. If the decrease of intermediate consumption is higher than the increase

of consumption of fixed capital, output will become lower, and vice versa. Value added (gross) of government and GDP will increase with the value of the extra consumption of fixed capital.

4. One conceptual issue in relation to the recording of expenditures on military weapons systems concerns the delineation between other changes in the volume of assets and consumption of fixed capital. Question here is how to account for losses due to the use of weapons systems during wartime and other military operations. The 2008 SNA is not explicit on this delineation. Para. 12.9 does state in more general terms that other changes in the volume of assets do include "... the effects of exceptional, unanticipated events ... These events also include those that destroy assets, such as natural disaster or war". However, one could argue that the whole purpose of military weapons systems is deterrence and the possible use in wartime and military operations. On the other hand, wars usually can be considered as exceptional events. All in all, it is proposed here to treat exceptional losses due to wars, etc. as other changes in volume of assets.

5. Another issue relates to the measurement of consumption of fixed capital. Here, the question basically comes down to what service lives and what depreciation profiles are to be used. The US Bureau for Economic Analysis (BEA) consulted with their Department of Defense, and came up with geometric depreciation rates and service lives as presented in the table below. One wonders whether other members of the AEG can provide similar information. And if not, whether the information below could be useful as proxies for other countries as well.

Asset type	Geometric depreciation rate (percent)	Service life (years)
Aircraft:		
- Air frames	7 to 11	15 to 25
- Engines	28	6
Strategic missiles	N.A. (straight line)	20
Ships	6 to 7	25 to 30
Tanks and armored personnel carriers	8	20

DEFINITION OF CATASTROPHES IN THE MEASUREMENT OF NON-LIFE INSURANCE

6. According to the 1993 SNA, output of non-life insurance should be measured as premiums (including premium supplements in the form of investment income attributed to policy holders) minus claims, all recorded on an accrual basis. This measure could be extremely volatile, and even negative, in the case of very high claims resulting from a major catastrophe. Therefore, the measurement of non-life insurance output has been changed, in the sense that adjusted premiums and adjusted claims are to be applied. Doing so, the 2008 SNA recommends three approaches: the "expectations approach", the

“accounting approach” and the “cost approach”. For more details, see 2008 SNA, para. 6.184 – 6.191 and para. A3.32 – A3.36.

7. Another change related to the recording of non-life insurance transactions and catastrophes concerns the recording of claims. According to the 1993 SNA, these claims are to be recorded as current transfers. On the other hand, according to the 2008 SNA, exceptionally large claims, such as those following a catastrophe, may be recorded as capital transfers, as the recording as an income transfer could distort measures such as disposable income and saving. Here, the question arises which claims are to be considered as resulting from a major catastrophe and, consequently, are to be recorded as a capital transfer.

8. At a micro-level, one could probably argue that every claim constitutes a capital transfer, as the claim will relate to the reimbursement of damaged/stolen durable goods and/or assets. Also, again looking from the micro point of view, most claims will distort the disposable income and saving of an individual household or enterprise. However, this certainly is not what the 2008 SNA is suggesting. The 2008 SNA seems to imply that (major) catastrophes are to be defined at a much higher level, e.g. at the national level. However, what constitutes a major catastrophe in a small country may be more or less irrelevant in a major economy. As a consequence, one country may record part of the claims as capital transfers, whereas another country considers them as income transfers. In the case of international trans-border transactions, this may lead to inconsistencies. An alternative approach is to ask the insurance industry to provide data on claims related to major catastrophes, as suggested by the US BEA. Although this may also contain a rather subjective element, it may indeed be the most viable solution.

SPECIFIC POINTS FOR DISCUSSION

9. Regarding military weapons systems, the AEG’s views are sought on the following:

(a) What guidance could be given on the recording of the destruction of military weapons systems during wartime and other military operations?

(b) What guidance could be given on the depreciation rates and service lives of military weapons systems?

10. Regarding the recording of transactions related to non-life insurance, the AEG’s views are sought on the following:

(a) What guidance could be given in relation to the measurement of capital transfers resulting from major catastrophes?