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Meeting on National Accounts**  
(Geneva, 24-26 April 2002)

**OECD/EUROSTAT TASK FORCE ON SOFTWARE MEASUREMENT  
IN THE NATIONAL ACCOUNTS**

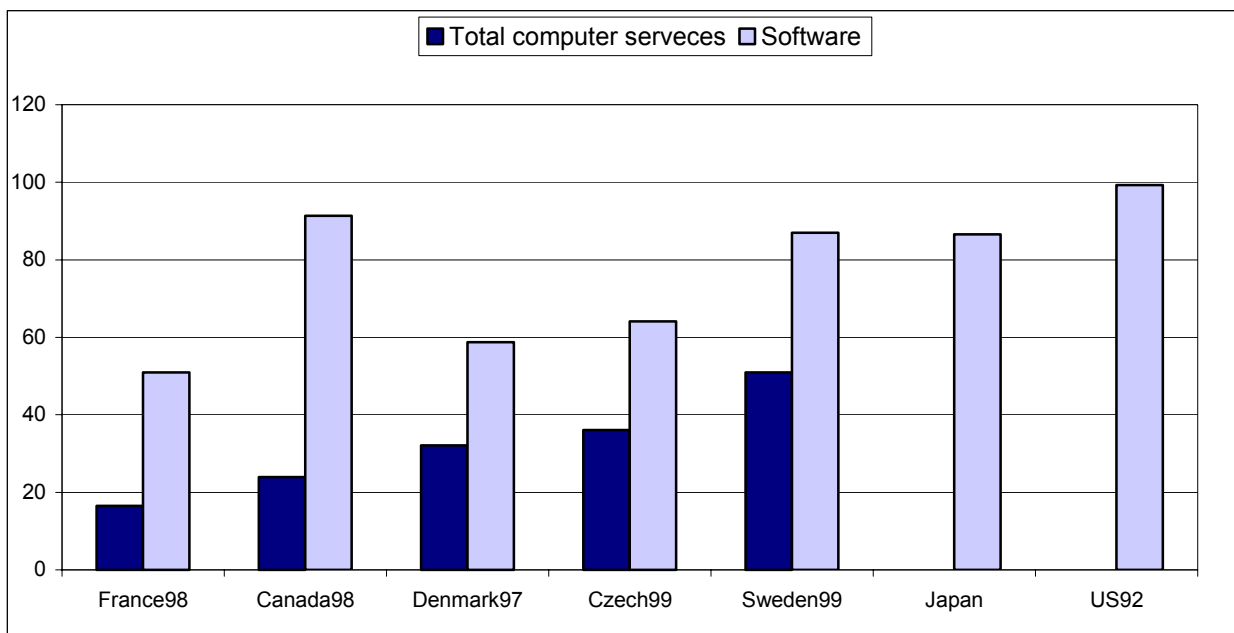
Supporting paper submitted by OECD\*

1. The task force on software measurement in national accounts was created in October 2001 after several studies showed that the implementation of the decision of the SNA 93 to capitalise software had been different between countries, to the point that the comparability of GDP growth was affected.
2. Participants to the OECD task force cover 19 countries of which 12 European and 7 non European countries. A parallel, European wide, task force was convened twice since October, the last meeting being on January 31-February 1, in London. The OECD task force is meeting in Paris during April 22-23. An EDG (password protected) has been set and contains now a large set of country documentation on software measurement, as well as several papers prepared by OECD and Eurostat. The general objective of the task force is to propose conceptual and practical recommendations on software measurement in the national accounts that will improve the comparability of the data between countries. These recommendations will be presented to the OECD national accounts expert meeting in October 2002 and to the Eurostat GNP Committee in July 2002.

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3. Responses to the questionnaire that was sent in the beginning of November have been analysed during January. The questionnaire has illustrated and confirmed the reasons of the differences in the measurement of GFCF in software. The synthesis of the responses is available on the EDG.

4. The first important conclusion of this analysis is that we can confirm that differences in statistical methods play a crucial role in the observed differences between software investment in different countries. The graph below is extracted from this synthesis. It shows that for a given expense of 100 on the same type of software services, the US will consider that 100 is capitalised, while France considers that only 50 is capitalised.

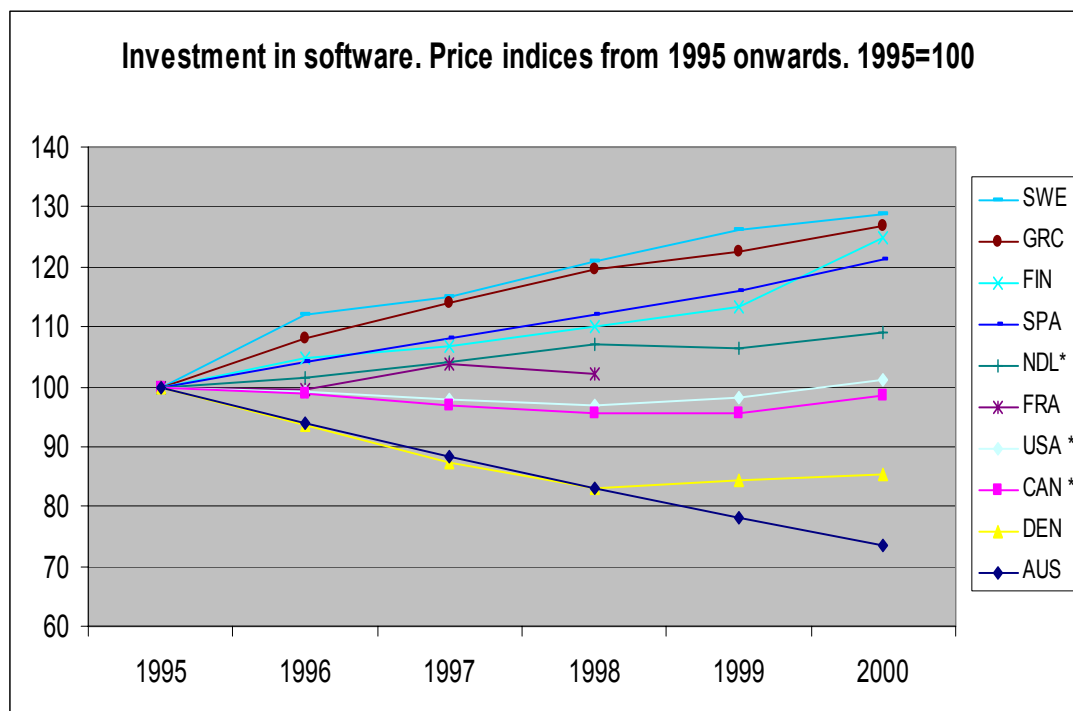


5. Responses from the questionnaire and discussions with business accountants confirmed that one of the main sources of difference between countries stems from the fact that, contrary to other products, traditional sources of national accounts are questionable. Even if business accounting recommends (and did it before SNA) capitalisation of software, the practice does not follow the theory. As a result, countries that base their estimate on traditional business surveys obtain results that are much lower than countries that estimate it independently.

6. The most concrete achievement of the task force would be to obtain comparable ratios: for 100 of expenses in software, the same percentage should be capitalised in all countries. It is to this benchmark that statisticians should be able, in a few years, to measure if the task force has succeeded.

7. To reach this objective, the discussions in the Eurostat task force showed that national accountants should first agree between themselves on the definition of what is “capitalisable software”. The task force will try to reach a large majority, if not a consensus, to support precise rules of delineation between what is capitalisable and what is not, in particular maintenance and repair and own account production. Some countries, such as Japan for example, do not consider any capitalisation of own-account software. Classification issues are important on the notions of originals and reproductions of originals. The conclusions of the task force will probably influence the re-emerging discussions on the treatment of intangible assets: licenses, royalties, patents, etc. Attention should be also given to the consistency of these definitions between statistical tools, and in particular between balance of payments and national accounts.

8. The responses to the questionnaire on software deflators are quite alarming. Between 1995 and 2000, the range of measured software prices in the national accounts spreads between +30% (Sweden) to -25% (Australia), as shown in the graph below. It seems that a new gap is forming between countries applying more or less estimated quality-adjusted price index and countries using pure salary indices as deflators. The session on prices will try to propose recommendations to avoid a new “computer price gap”.



9. The final goal of the task force will be to discuss recommendations on the practical measurement of software investment in the national accounts.

10. Even if business accounts' practices on software investment differ from SNA recommendations, the best source for the estimation of software investment will always remain business surveys.

11. This is why the task force will propose recommendations on the organisation of such surveys, with a view to obtain results that are consistent with national accounts definitions of software investment. The Australian Bureau of Statistics will present its experience: Australia is the only country in which the estimates of software investment are directly based on a survey.

12. However, in many countries, adequate surveys will still lack for a certain number of years. Recommendations should be therefore made to implement indirect ways to estimate total GFCF in software that is consistent between countries. This indirect way is called the "supply" method. It includes a series of adjustments to sales data, in order to avoid double counting, and a macro-estimate of own-account production.

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