29th Voorburg Group Meeting

Software Publishing Revised and Re-visited

Terry Bradley – Producer Price Indexes

statistics for informed

decision making

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Introduction

- Overview

- Classification

- Market Evolution

- Turnover and Price Measurement

- Addressing Quality Changes

- Summary

Overview

- There is general consensus that the activities in scope for the Software Publishing industry are broadly:
  - design of non-customised computer software (packaged software) for multiple clients
  - publishing of said software
  - support activities such as, providing documentation, assisting installation and technical support

Classifications

- All of the numerous industry and product classifications cover the activities in a broad sense with some being more detailed than others

- And not every classification categorises the activities in the same way

- The differing treatments are valid however when considering the ambiguity of the products and product descriptions

Classifications

- NAPCS for example identifies 15 separate products covering System Software, Applications Software and Support Services

- CPA (10 products) on the other hand does not include the Support Services products

- Despite what are, in many cases, detailed and comprehensive classifications of products within industries, problems arise from the lack of alignment with current business practises.

Market Evolution

- As with many "hi-tech" industries evolution of products is fairly constant

- "Traditional" software publishing is on the decline with businesses moving towards "full-service" products

- For example, "Open Source" software is provided free and clients pay only for support services

- These types of products provide services across different classifications

Market Evolution

- In most countries reporting of this industry, high market concentration is common

- Also, the largest revenue-earners can often be foreign owned, which would correspond to large export markets mentioned by some countries

- Whether the production is domestic or is merely the licensing of overseas products has implications for measurement

Turnover and Price Measurement

- Again the challenge is mainly around the identification of the products

- Administrative data is generally not appropriate as the level of detail is insufficient

- Dedicated product based surveys are required to provide clear distinction of products

Turnover and Price Measurement

- Typically software publishing involves a mixture of product licenses (term limited or subscription) and maintenance services

- Discounting is common, based on numbers of software licenses

- Pricing should have correspondence with the relevant Product Classification to ensure the multiple types of product (licenses, tech support service etc.) are captured

Capturing Quality Changes

- Software products need specific quality adjustment techniques that account for the updating of versions. Software packages typically are supported with minor upgrades and major version changes

- Methods currently used range from the implicit "no-change" option to explicit changes for the input (production) cost of research and development

Summary

- In general, all countries appear to have similar challenges with the measurement of this industry

- The overlap with the Computer Programming industry is a particular problem

- Many providers of Software Publishing services are active in the Computer Programming industry (and vice versa)

- Rapid product evolution is challenging for price measurement

Summary

- To mitigate the overlap between industries detailed product based establishment surveys are appropriate

- A range of pricing methods are necessary to capture the diverse range of products

- Rapid evolution of the products requires effective quality adjustment methods for pricing

Questions

- PLEASE!