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Software Publishing Revised and Re-visited

Terry Bradley – Producer Price Indexes

The Australian Bureau of Statistics
Introduction

• Overview
• Classification
• Market Evolution
• Turnover and Price Measurement
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• 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!