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Towards the 2025 System of National Accounts: Digitalization

Measuring Knowledge Based Capital (Marketing Assets)

Practical Guidance—Outline¹

Prepared by International Monetary Fund

Summary

This document outlines the purpose of the Handbook on Measuring Knowledge Based Capital (Marketing Assets). It provides an overview of the factors leading to the proposed reclassification of marketing assets, and an overview of the conceptual framework for recording knowledge-based capital, in the Balance of Payments and International Investment Position Manual, seventh edition and 2025 System of National Accounts. Further, it discusses the functional definition of marketing assets, the data sources and estimation procedures, and deriving the capital stock using the perpetual inventory method, which is an established method for deriving estimates of capital services.

¹ Draft version.

I. Chapter I: Introduction and Overview

A. Purpose of the Handbook

- 1. This section outlines the purpose of the Handbook. It provides an overview of the Balance of Payments and International Investment Position Manual (BPM), sixth edition and 2008 System of National Accounts (SNA) update process and the factors leading to the proposed reclassification of marketing assets in the BPM7 and 2025 SNA.
- 2. Both the *BPM6* and the *2008 SNA* classify marketing assets as non-produced, non-financial assets—assets that come into existence other than through process of production. Despite the recognition that marketing assets are the result of investment by corporations, the 2008 SNA does not identify them as produced fixed assets. The reason is that their value is difficult to measure; therefore, for pragmatic purposes marketing assets are classified as non-produced assets. Discussions of the issue during the BPM 6/2008 SNA update process considered whether the measurement challenges relating to the capitalization of marketing assets at the time of SNA 2008 and BPM6 were implemented, have been resolved. The Advisory Expert Group on National Accounts (AEG) and the IMF Committee on Balance of Payments Statistics (BOPCOM) supported classifying marketing assets as produced assets but recommended targeted testing before deciding on the final recommendation.
- 3. Since the BPM6/2008 SNA were updated, there has been limited internationally coordinated research on the capitalization of marketing assets. Research by Statistics Netherlands in 2008 into intangible capital and economic growth did include brand equity or marketing assets and showed that capitalization of certain advertising expenses is an option. Other research, such as Corrado, Hulten, and Sichel (2005 & 2009), have also taken a broader view of what should be capitalized and included marketing assets as capital formation in the U.S. economy.
- 4. The joint AEG/BOPCOM Globalization Task Team undertook a two-stage testing strategy to determine if marketing assets could be treated as produced assets. Based on the results of testing, the authors of the guidance note recommend including marketing assets within the production boundary and treating them as produced assets in the 2025 SNA and BPM7. This would entail major changes in the SNA as it would expand the production and produced asset boundaries.

B. Conceptual Framework

- 5. This section provides an overview of the conceptual framework for recording knowledge-based capital as presented in the 2025 SNA and BPM7.
- 6. Marketing assets are defined as the capitalized value of expenditures on advertising and promotional activities, to enhance the overall impression a customer or potential customer gains from their experience with the company and its products. They consist of items such as brand names, mastheads, trademarks, logos and domain names. *Marketing assets are included in the SNA production boundary and treated as produced assets*.
- 7. While international transactions related to marketing assets are already included under trade in services, outright sales are included in the capital account of the balance of payments (as non-produced non-financial asset transactions). The change implies moving these sales from the capital account to the goods and services accounts. Moreover, in national accounts the change implies moving outright sales from acquisition less disposals of non-produced non-financial assets to gross capital formation and moving expenditures for marketing assets on own account from intermediate consumption to capital formation. It was noted that further efforts should continue to assist countries in developing experimental estimates to help establish "best practices" and assessing the impact of the estimates in the national statistics.

II. Chapter 2: Definition and Scope

A. Functional Definition of Marketing Assets

- 8. In developing a functional definition, the guidance will take account of the experimental estimates developed by national statistical agencies and will seek to harmonize terminology used across countries by developing a common understanding of the asset boundaries.
- 9. Marketing assets is defined as the capitalized value of expenditures on advertising and promotional activities (whether purchased or produced on own account), to enhance the overall impression a customer or potential customer gains from their experience with the company and its products. They consist of items such as brand names, mastheads, trademarks, logos, and domain names.
- 10. A distinction is made between advertising designed for short-term sales growth and information sharing and advertising designed for long-term brand building. Advertising to provide information to customers, such as notices of openings, address changes, and job advertisements, may be considered short term and therefore should be considered intermediate consumption.
- 11. Although brand-building is normally associated with corporations, it can also be undertaken by NPISHs and government. It is unlikely that households--in their capacity as producers—would undertake marketing and advertising.
- 12. Governments may undertake advertising relating to the delivery of specific services that would develop loyalty and trust. Likewise, some NPISHs may also be engaged in building brand equity as part of their fundraising, but they may also be engaged in advertising to educate the public.
- 13. The industry classification (ISIC Rev 5) is as follows:

Division 73: Activities of advertising, market research and public relations

This division includes the creation of advertising campaigns and placement of such advertising in periodicals, newspapers, radio and television, on the Internet, or other media as well as the design of display structures and sites. These advertising activities are often provided via advertising agencies and media representatives.

The division includes activities of provision of information about markets for goods and services and provision of information about public relations and public opinion polling activities, which may be based on the collection and analysis of original data, or on the research and analysis of existing data.

This division excludes:

- activities by which the income is generated by advertising should be classified according to the actual activity, e.g., publishing of advertising newspapers;
- sale of advertising time or space directly by owners of the time or space (publishers etc.), see the corresponding activity class.

B. Boundaries and Overlaps

1. Overlaps with other assets

- 14. What are the boundary problems and potential overlaps with other non-financial assets. In defining the scope, the Handbook will clarify the boundaries with the following:
 - · Research and development
 - Data
 - · Software and databases
 - Artistic originals—the treatment of product placement in film, plays, books.
 - · Organizational capital

15. These boundary problems and overlaps with be revisited in the following chapter in assessing the data sources and adjustments that may be undertaken in data collection.

2. Gross Fixed Capital Formation vs Intermediate Consumption

- 16. Most advertising has the potential to create long-lived brand equity, and therefore potentially can be capitalized as an intangible asset. However, advertisements for the sale of a specific product or a specific sales period (for example advertisements for close-out sales; used machinery and equipment; auctions for seized items) cannot be considered as being designed to produce long-lived brand equity. Likewise political advertisements and advertisements for entertainment or sporting events are not designed to build loyalty after the event.
- 17. Marketing assets consist of items such as brand names, mastheads, trademarks, logos, and domain names (BPM6 paragraph 13.17 and 2008 SNA paragraph 10.198) used by an entity to promote its products or brands. They are therefore key drivers of corporate value. Corporations invest in building and supporting their brands to differentiate their products and to develop a positive emotional connection with their customers in the hopes that they will purchase their product over the alternatives. The 2008 SNA further states that a brand can be interpreted as far more than just a corporate name or logo. It is the overall impression a customer or potential customer gains from their experience with the company and its products.

III. Chapter 3: Data Sources and Estimation

18. The data sources and estimation procedures are intrinsically linked and will be discussed together. The estimates are derived for both purchased branding services and inhouse production (own account production). Data on purchases may be readily available from the units that produce or purchase these services through enterprise or other business surveys.

A. Direct Purchases

- 19. Data on direct purchases on advertising and marketing may be derived from advertising and media companies. The output would include expenditures on creative teams as well as the purchase of airtime on behalf of clients. However, the output of advertising companies may not reflect the total cost of purchased advertising as some of the output may be produced and sold by units that are not classified as advertising companies.
- 20. This section will review the possible sources for data on the direct purchases of advertising and marketing. It will present the possible advantages and limitations of these sources in terms of coverage, cost, timeliness, consistency with the conceptual framework. These sources will include the following:
 - Direct information from advertising companies and market research companies
 - Direct information from media and Internet companies
 - Administrative data (e.g., accounts of corporations)
 - Structural business surveys/enterprise surveys

B. Own-Account Production

- 21. A large proportion of advertising and promotional activities is produced on own account. This production process entails the creation phase (brainstorming, planning, and *design*), the management, and the approval and distribution.
- 22. A sum of costs approach to estimating own-account production would require information on:

Total number of employees working on own-account production

Average compensation of employees

Proportion of time spent on own-account production

Other intermediate costs used in own-account production

Notional operating surplus related to own-account production (capital services) (only

or Depreciation (non-market producers)

Other taxes (less subsidies) on production

- 23. This equation requires two key sources of data: (i) the occupations engaged in own-account production of marketing assets; and (ii) the average time spent on producing the marketing assets by these occupations.²
- 24. Determining the occupations contributing to the production of marketing assets. This would be based on the ILO's International Standard Classification of Occupations (ISCO) or a corresponding national classification. The most relevant ISCO groupings are as follows:

Managers

- 122 Sales, Marketing and Development Managers
- 1221 Sales and Marketing Managers
- 1222 Advertising and Public Relations Managers
- 1223 Research and Development Managers

Business and Administration Professionals

- 243 Sales, Marketing and Public Relations Professionals
- 2431 Advertising and Marketing Professionals
- 2432 Public Relations Professionals
- 2433 Technical and Medical Sales Professionals (excluding ICT)
- 2434 Information and Communications Technology Sales Professionals
- 25. The above list may be considered the primary occupations for marketing and advertising. In addition, countries may consider a range of other occupations based on national circumstances. This section will outline the key issues to be considered when the occupations are being assessed. The section will recommend further breakdowns of the ISCO national classifications to capture occupations specifically related to marketing and advertising.
 - Estimating the proportion of time spent on production
- 26. This is a more challenging undertaking and would require the development of time use estimates to derive the number of hours each occupation allocates or spends on branding and marketing. This section will review some of the approaches that may be used to derive time use estimates—time use surveys and other approaches.
- 27. Intangible assets produced on own-account are not recognized in the international accounting standards (see Annex II). Therefore, indirect measurement practices will have to be developed. As proposed for other intangible assets, a sum of cost approach is recommended for estimating marketing assets produced on own-account.
- 28. Box: Time Use Surveys (country experience)

1. Double counting and overlaps in source data

29. This section will discuss possible overlaps in the source data used to estimate the various types of intangible assets and how these overlaps may be addressed. For instance, surveys on R&D may show possible overlaps with market research. This can be addressed by including specific questions and explanatory notes in the survey requesting that

² From the Handbook on Deriving Capital Measures of Intellectual Property Products (OECD, 2010). This framework is used for measuring own-account production of intellectual property products. A modified version of this procedure may also be applicable to marketing assets.

responding firms exclude all market research. Own account estimates may also use the same sources to estimate marketing assets and other intangible assets, such as data.

C. Measuring Cross-Border Flows

- 30. This section discusses cross-border flows of marketing and advertising. In particular, it will discuss the measurement of cross border flows in the presence of multinational corporations that dominate the production of marketing assets.
- 31. Items that are classified as fixed assets in national accounts (i.e., used for more than one year and the licensee assumes all the risks and rewards of ownership) would be classified in one of the following standard service components: computer and information services; marketing asset services; personal, cultural, and recreational services; R&D services.
- 32. Items that are classified as consumption in national accounts (i.e., used for less than one year and the licensee is not concerned with the risks and rewards on the product) would be classified in the following standard service component: charges for the use of intellectual property *n.i.e.*
- 33. As marketing assets will be treated as produced non-financial assets, the sale/purchase of these assets should be recorded in the services account instead of the capital account (BPM6 treats marketing assets and goodwill as non-produced non-financial assets—see paragraphs 13.17-13.18).
- 34. Transactions in marketing assets will be recorded under technical and other business services as a standard second-level category of "marketing asset services".

IV. Chapter 4: Deriving the Capital Stock

35. The capital stock may be derived using the perpetual inventory method, which is an established method for deriving estimates of capital services. The Handbook on Deriving Capital Measures of Intellectual Property Products (OECD, 2010) presents a comprehensive discussion on using the PIM to derive measures of capital stock.

A. The Perpetual Inventory Method

- 36. The key parameters in the perpetual inventory method (PIM) are the expected service life of a group of assets of a similar type, the rate at which its productive capacity, or efficiency, is expected to decline as it ages and the rate at which its value is expected to decline as it ages. The last two are interdependent and their relationship hinges on a discount rate. Not all assets within a group can be expected to have exactly the same service life, and so a probability distribution function is usually specified8. The most important PIM parameter is the service life (OECD, 2010).
- 37. This section will discuss the use of the PIM for deriving estimates of the capital stock for marketing and advertising. It will follow and build on established guidance presented in the OECD Handbook.

B. Estimating the Service Life

- 38. Very little information is available on the service life of marketing assets The length of the service life also depends on the capitalization rate of advertising and market research expenditures. The higher the capitalization rate, the shorter the lifespan of the corresponding assets.
- 39. The papers use anecdotal evidence and information from surveys to estimate service life of marketing assets to be two to three years. Some brand preferences may be longer lived, especially for major brands that have invested heavily in advertising over a long term. Nevertheless, it is expected that the service lives may vary depending on the industry and the

product. Surveys may ask businesses to report how long they would expect to benefit on average, from a range of intangible investments. Some surveys found that for 'reputation and branding', the mean benefit life was about three years (Martin, ONS 2019). However, this is expected to vary substantially based on the type of product, the evolution of products within the group, the industry, and the level of investment

- 40. This section will review the recent findings and provide recommendations on estimating service life service life of the asset through:
 - · Modeling
 - · Directly observable data
 - Combination of methods
- 41. Box: Determining the Capitalization Rate of Advertisement in Japan

V. Chapter 5: Price and Volume Estimation

A. Price and volume Measures

- 42. This section will discuss the appropriate measures to derive the price and volume estimates.
- 43. It is difficult to measure the prices of intangible assets. Purchased marketing assets may be customized to the needs of the purchaser, therefore it may be difficult to identify comparable assets. Likewise, no prices may be available for marketing assets produced on account.
- 44. A services producer price index (SPPI) that covers advertising and marketing is the simplest method to derive volume estimates for marketing assets. However, not many countries compile SPPIs.
- 45. However, developing specific product indices based on the rates charged for the services, may be the simplest method to derive the volume estimates. For instance, television advertising time slot rates may be used to derive an index of advertising.
- 46. The 2008 SNA recommends the use of a "pseudo output price index such that when it is compared to the aggregate input price index the difference reflects the productivity growth thought to be occurring in the production process". The 2008 SNA notes, "pseudo output price indices can be derived in various ways, such as by adjusting the input price index according to the observed productivity growth of a related production process or by basing the growth of the pseudo output price index on the observed output price indices of similar products.

B. Quality adjustment

- 47. Accounting for quality and behavioral change that may lead to change in service lives from obsolesce, not depletion. Quality adjustment is a major challenge in national accounts compilation. This section will outline quality aspects of advertising and how the adjustments may be estimated.
- 48. Box: Services in the Producer Price Index

Annex I

Case Studies

This section will present selected case studies that summarize the experimental estimates that have been developed by national statistical agencies.

The focus of these summaries will be on the key challenges and how they were addressed.

Annex II

International Accounting Standards and Marketing Assets

International Accounting Standards (IAS) 38 outlines the commercial accounting treatment of intangible assets. Given commercial accounts are a key source of data any treatment in BPM and SNA that deviates too much from the IAS can lead to issues in obtaining reliable estimates. Marketing rights, trademarks, and trade dress (unique color, shape or package design) are listed in IAS 38 as examples of intangible assets.

An intangible asset is recognized in the accounts if it must be probable that the expected future economic benefits that are attributable to the asset will flow to the entity and the cost of the asset can be measured reliably.

However, IAS 38 distinguishes between internally generated intangible assets and those acquired separately. Internally generated intangible assets should not be recognized in the accounts. The costs incurred are indistinguishable from the costs of developing a business as a whole. The same argument applies for subsequent expenditures incurred in connection with such tangible assets even when acquired externally.

Marketing assets separately acquired may be recognized as an asset under IAS 38 if they satisfy the general recognition and measurement conditions.

Advertising and promotional activities are specifically identified as costs that should be expensed and not capitalized in IAS 38.

Background Papers

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