

Bundling in services turnover statistics and SPPIs in Canada

30th Voorburg Group Meeting

Sydney Australia

September 21 – 25, 2015

by

Mary Beth Garneau, Joseph Waihenya and Ian Donegan,

Producer Prices Division

and

Anik Lacroix and Sylvain Ouellet,

Investment, Science and Technology Division

Statistics Canada

Special thanks to the following people for their input and feedback to the authors' understanding of the issues and treatment across Statistics Canada:

Robert Campbell, Joumana Harfouche, Mesfin Mirotschie and Nathalie Taktek, Industry Accounts Division; Jackie Maisonneuve, National Economic Accounts Division; Franklin Assoumou Ndong, Standards Division; Wulong Gu, Economic Analysis Division; Mark Uhrbach of Investment, Science and Technology Division; Ron Morency, Retail and Services Industries Division; Pat Adams, Enterprise Statistics Division; Vlad Carpinisan, Consumer Prices Division; Paul Nixon, Producer Prices Division

Contents

- Bundling in services turnover statistics and SPPIs in Canada 3
 - 1 Bundling in Canada 3
 - 2. Measurement of bundling in the Canadian Telecommunications Sector 5
 - 2.1 Context 5
 - 2.2 Bundling related information 5
 - 2.3 Telecommunication SPPI 7
 - 2.4 Measurement from a demand side perspective 7
 - 3. Measurement of bundling in the Canadian Retail Trade Industry..... 8
 - 3.1 Context 8
 - 3.2 Occurrence of bundling 9
 - 3.3 Implication for the RSPI..... 11
 - 3.4 Proposed solution to the bundling challenge:..... 12
 - 4. Impact on the System of Macroeconomic Accounts 14
 - 4.1 Alignment of turnover data and price deflators 14
 - 4.2 Product detail 14
 - 5. Conclusion..... 15
- References 15
- Appendix A..... 17
- Appendix B 18

Bundling in services turnover statistics and SPPIs in Canada

Canadian firms offer bundled products across many sectors of the economy. A broad spectrum of price-bundled products¹ can appear in virtually any industry. Some examples include, website design and webhosting services, discounted prices for purchasing home telephone, cable and internet services from a single service provider, bundling of parts with repair and maintenance services and travel packages that combine airline tickets with destination accommodation. The bundling of intellectual property and branding with goods production can considerably change the market price of a product such as a t-shirt.

While bundled products enable firms to capture a higher volume of business from each customer by offering multiple goods and services combined at a discounted rate, bundling can lead to issues for statistical agencies engaged in accounting for economic activities. This is because businesses may not be able to disentangle the transaction prices of each product component in bundled transactions to provide the information required by statistical agencies.

This challenge impacts product and industry classifications, measurement of turnover, calculation of price indexes and, ultimately, in the assembly of Macroeconomic Accounts. The first section of the paper outlines a number of areas where bundling is prevalent in the Canadian economy and summarizes some of the ways classifications have adapted to the issue. The rest of this paper describes measures and procedures taken by survey programs to address measurement issues for bundled services in two specific industries.

Bundling occurs especially frequently within the Canadian Telecommunications Industry due to its concentration. Canadian Telecommunications firms are typically involved in providing internet, cable, land line and mobile (cell) telephone services and will offer price incentives to bundle all services through one provider. The second section of the paper provides details on how Statistics Canada accounts for bundling in the telecommunications sector. The third section provides an example of how product bundles are handled in the Retail Trade, particularly in the reselling of cellular phones. It outlines price measurement issues and describes the current process implemented for the RSPI to account for bundling within the cell phone retail environment. It also proposes longer term solutions to resolve bundling issues, from an RSPI perspective.

Section four provides a brief summary of the measurement issues and challenges in by the Canadian Macroeconomic Accounts arising from bundling, while section five summarizes the paper and offers some concluding remarks.

1 Bundling in Canada

As a starting point, this paper borrows the basic definition of bundling from John Murphy's paper "Service Products and Pricing Bundles – Discussion Paper on Treatment in Classification, Output Statistics and SPPIs" also presented at the 30th Voorburg Group meeting:

¹ Murphy, John, (2015) Service Products and Pricing Bundles – Discussion Paper on Treatment in Classification, Output Statistics and SPPIs

“A price bundle is a bundle of services or goods that are available separately but are grouped together and sold as a group. This sale often includes some level of discount for purchasing multiple goods, services, or combinations. “

Bundling can be found in many economic activities in Canada, particularly in the Services sector. In the product descriptions of the North American Product Classification System (NAPCS) there are numerous explicit references to “bundles”. Care needs to be taken in introducing bundles into the classification as each bundle consists of a group of existing products, and may lead to a double count. An alternative would be to produce variants of the NAPCS classification that include bundles. The challenge here is that there are many different permutations possible and bundles frequently change. A summary of the economic activities listed in Appendix A and detailed NAPCS production descriptions are listed in Appendix B. These lists are by no means exhaustive but reflect areas where the classification system has explicitly noted bundled products. Future NAPCS development will likely include a systematic analysis on the treatment of bundles in NAPCS and provide guidance on the concept and how to approach across the classification.

In addition, bundling may be considered in industry classifications. Statistics Canada follows the North American Industrial Classification System (NAICS). Implementation rules for certain industries include instructions for classification in cases where firms provide bundled products and services. For example, parts required to bring a machine back to its original state are necessary inputs to provide the service of repair and maintenance. Under the NAICS, establishments that repair products are classified into the repair service industry and not the retail industry regardless of how their revenues are divided between parts/products and services². In the Canadian Macroeconomic Accounts the output of repair services is just the service component with a separate margin for parts.

In some cases, multiple industries, such as Website Design and Webhosting (*NAICS: 541 & 518 or ISIC: J620 & J631*) may provide similar bundles of services. Companies that design websites may offer to host them given the proliferation of lower cost business cloud storage solutions. The website design service provider may also purchase storage space on a cloud system that enables them to provide webhosting as a separate or a bundled service to their design work.

In fact, Statistics Canada’s “Mini Paper on Turnover/Output for Software Publishers in Canada” presented at the 2013 Voorburg meeting notes the challenges associated with changes in the mix of services provided by different firms in different sectors providing similar bundles of services:

“establishments that are classified to one of the three computer service industries can purchase or merge with companies classified to another computer service industry or other industry outside of computer services altogether. This can result in changes to the dominant activity from one year to the next. The dynamic nature of this industry, with these mergers and acquisitions, as well as innovation and new inventions that occur in these types of industries, brings about the challenge of keeping the frame up-to-date to reflect the changing business structures and activity.”

² An exception to this is new car dealerships that include repair services which are considered retail (NAICS 441110).

One way to deal with bundling or convergence of the NAICS (for telecom) is to aggregate the industry dimension and provide more product detail.

2. Measurement of bundling in the Canadian Telecommunications Sector

2.1 Context

In 2013, operating revenues for the telecommunications industry totalled \$57.2 billion, up 1.3% from 2012³.

The Telecommunications industry is regulated by the Canadian Radio-television and Telecommunications Commission (CRTC), which has the legal mandate to collect information directly from Telecommunications Service Providers, as is the case for Broadcasting Service Providers. The data collection exercise is conducted in partnership with Statistics Canada. In 2013, the CRTC imposed a Wireless Code (Telecom Regulatory Policy CRTC 2013-271) on wireless service providers. That Code deals with devices (cellular phones) that are bundled in the context of a wireless telecommunications service contract. Whenever there is bundling of a device with a telecommunication service, the service provider must disclose the undiscounted retail price of the phone in the contract.

The Annual Survey of Telecommunications, conducted in partnership with the CRTC, collects information on telecommunications services. This information is collected at the legal entity level and may include some data from several different NAICS in which the telecommunications company operates. Information includes revenues from wireless services, as well as information on revenues from the sale of equipment sold in combination with such services (i.e. terminal equipment). Therefore the statistical programs have access to information on both telecommunication services and related equipment that is sold or leased.

2.2 Bundling related information

Within the Annual Survey of Telecommunications (AST), there are two forms that are used to collect data relating to the prevalence of bundling:

The first form (Form 281 below) requests “total cost of goods sold” in addition to information on number and value of wireless devices, cancellation fee amounts, and opening and closing inventory of wireless devices. This information is shared with the System of Macroeconomic Accounts in order to help them differentiate the service from the device in the context of wireless service.

³ Source: Statistics Canada, CANSIM, Table 356-0004.

Figure 1- AST Form 281

Form 281 - Wireless devices and contract durations	
Filed under the authority of the <i>Telecommunications Act and the Statistics Act</i>	
Filed in Confidence	
Part A - Wireless Devices	
Wireless devices with service contracts	
	Total
1 Number of wireless devices activated with a service contract (post-paid and pre-paid), between January 1 and December 31 of the reporting year	0
2 Total value (in dollars) for devices in question 1 at the lesser of the two following amounts: the manufacturer's suggested retail price or the price set when the device is purchased without a contract	0
Cancellation Fee	
	Total
3 Total early cancellation fee amounts received from post-paid contracts (exclude write-offs)	0
Inventory in Dollars	
	Total
4 Opening inventory of wireless devices as of January 1 of the reporting year (exclude write-offs and overhead)	0
5 Total purchases of wireless devices	0
6 Closing inventory of wireless devices as of December 31 of the reporting year (exclude write-offs and overhead)	0
7 Total cost of goods sold (sum of questions 1 and 2 minus 3 above)	0

Source: Statistics Canada, Annual Survey of Telecommunications

The second form (Form 296 below) requests information on total number of residential customers and total revenues from residential bundled telecommunications services for 2 services, 3 services and 4 services. This form provides information on the bundling of different services (as opposed to the bundling of a device with a service).

Figure 2 - AST Form 296

Form 296 - Residential bundled telecommunications services				
Filed under the authority of the <i>Telecommunications Act and the Statistics Act</i>				
Filed in Confidence				
Bundled services	2 Services	3 Services	4 Services	Total
1 Number of residential customers	0	0	0	0
2 Revenues	\$0	\$0	\$0	\$0
3 Total number of residential customers (with and without bundles)				\$0

Source: Statistics Canada, Annual Survey of Telecommunications

In 2013, “there were over 10.4 million subscriptions to bundled services for which there was a monthly reduction in price for the bundle” according to the compilation made by CRTC, “The subscriptions include two or more of the following services: local telephone, Internet, mobile wireless, and cable distribution. Bundles including long distance and calling features were not considered in this analysis.”⁴

Figure 3 - Number of subscriptions with bundled services (millions)

	2009	2010	2011	2012	2013	Compound annual growth rate 2009-2013
Number of subscriptions with bundles	7.5	8.8	9.4	10.0	10.4	8.6%
Annual growth	30.4%	17.1%	6.4%	6.3%	4.1%	

Source: CRTC Communications Monitoring Report 2014, Table 2.0.4

⁴ CRTC Communications Monitoring Report 2014, Section 2.0 Canadians at the centre of the communication system, d) Connections. <http://www.crtc.gc.ca/eng/publications/reports/PolicyMonitoring/2014/cmr.htm>

2.3 Telecommunication SPPI

The Quarterly Telecommunications Survey (QTS), conducted in partnership with the CRTC, collects revenues and corresponding quantities, such as the number of lines, or the number of minutes, by the following service categories:

- Local & Access (telephone services)
- Wireline Long Distance (telephone calls made outside of local calling area),
- Mobile Wireless (cellular services),
- Internet (including all services and technologies),
- Data & Private Line (telecommunications within and between establishments), and
- Broadcast Distribution Undertaking (video broadcasting over all telecommunications networks).

Retail versus wholesale and residential versus business components are also identified, where applicable.

Each individual service category has separately reported revenues, and there is no overlap of information, even where service contracts could include bundled services. Revenues reported for each line of business include all income attributed to that service, taking into account discounts on bundled packages. In a very simple example, assuming telephone, long distance and internet services each cost \$100 regardless of minutes or lines, a bundle with a 5 percent discount on each service would show up in each of the three corresponding business revenue lines at \$95. Regardless of how services are bundled at purchase, revenues reported are separated into their respective service categories. Although bundling is not explicitly addressed, the unit value method accounts for the effect of bundling when service categories are separated into distinct groups.

Statistics Canada is currently piloting a Telecommunications Services Price Index using data from this survey. The pilot index is produced by aggregating unit value prices from a fixed basket of telecommunications services using the Laspeyres formula with weight updates every two years.

2.4 Measurement from a demand side perspective

Statistics Canada also collects data on bundling from households. In Statistics Canada's Survey of Household Spending (used to calculate the CPI basket and to calculate household consumption), some questions on bundling are included with questions on communication services expenditures. The SHS questionnaire⁵ includes questions on the following:

- Whether the household pay for two or more of the following services as a package or "bundled services": telephone, cell phone, cablevision, satellite TV, Internet or home security systems (CS_Q010)
- What services are included: landline telephone, cell phone, cablevision, satellite TV or radio services, Internet access services (incl. Virus services), home security services
- Whether such expenses can be broken down
- How much was the last payment for "these packaged or bundled services" and how many weeks or months did the payment cover (questions on payment were also asked for each separate service)

⁵ http://www23.statcan.gc.ca/imdb/p3Instr.pl?Function=assembleInstr&lang=en&Item_Id=152605#qb196268

Statistics Canada has also developed and tested new content for a potential redesigned survey combining Canadian Internet Use Survey with the Residential Telephone Service Survey. While the survey has not moved beyond the feasibility stage, the testing showed promising results for the following question:

Q21. Do you buy multiple telecommunications and cable services together from the same provider (bundle)?

1 - Yes

2 – No

All respondents identified being familiar with what a ‘bundle’ was even if they did not have a bundled service contract.

3. Measurement of bundling in the Canadian Retail Trade Industry

3.1 Context

Retailing is a multi-billion-dollar industry in Canada, with operating revenues totaling \$505 billion in 2014, up 4.5% from 2013⁶. In 2014, the industry employed approximately 2.1 million Canadians or 15.3% of the total working population⁷.

Statistics Canada produces several surveys aimed at measuring turnover and service producer prices statistics for this industry⁸. Surveys are released at the aggregate and detailed levels including service producer price indexes for 10 of the major retail sub-sectors.

Figure 4 - Retail trade, 2014 Annual sales breakdown by the North American Industry Classification System (NAICS[ISIC])

North American Industry Classification System	Billions of dollars
<i>Motor vehicle and parts dealers (441[G4510])*</i>	119.7*
Food and beverage stores (445[G4711])	110.8
Gasoline stations (447[G4730])	64.2
General merchandise stores (452[G4719])	63.7
Health and personal care stores (446[G4772])	36.2
Building material and garden equipment and supplies dealers (444[G4752])	28.2
Clothing and clothing accessories stores (448[G4771])	28.1
Furniture and home furnishings stores (442[G4759])	15.9
Electronics and appliance stores (443[G4741])	14.8
Miscellaneous store retailers (453[G4773])	11.6
Sporting goods, hobby, book and music stores (451[G4763])	11.4
Total	505

* Only Automotive Parts, Accessories and Tire Stores (4413[G4530]) are included in the SPPI

⁶ Source: Statistics Canada, CANSIM, Table 080-0020

⁷ Source: Statistics Canada, CANSIM, Table 282-0008

⁸ Garneau, Mary Beth (2010) Retail trade in Canada, Turnover/Output Measures and Practices in Canada, page 3

Figure 5 - Statistics Canada coverage of the retail trade industry

Turnover surveys	<ul style="list-style-type: none"> • Annual retail trade survey and annual retail non-store surveys. These measure the financial characteristics of Canadian retailers. Key financial data generated include revenues, expenses, inventory information which are used to calculate gross margins for the industry, • Monthly retail trade survey collects total sales and the number of retail locations by province and territory on a monthly basis, Quarterly Retail Commodity Survey (QRCS) collects detailed information about retail sales in Canada by commodity, compiled on a quarterly basis.
Service Producer Price Index (SPPI)	<ul style="list-style-type: none"> • Retail Services Price Index (RSPI) is based on the margin pricing⁹ approach in which the difference between the average monthly retail and vendor price for a particular product constitutes the retail service price.

3.2 Occurrence of bundling

Turnover surveys

One of the challenges encountered in the production of turnover statistics for the Canadian retail industry was the classification of retailers that transacted in bundled products as their main activity. Major telecommunication service providers and their authorized dealers in Canada have established numerous retail outlets in which cell phones and service contracts are sold to consumers in addition to other related accessories. For these stores, most of their revenues are derived from commissions received after customers sign up to service plans and to a lesser extent, from the sale of assorted accessories. The question of whether to classify these establishments into the telecommunications industry or into the electronics and appliance stores sub-sector (NAICS 443 [ISIC: G4741]) was of critical importance given the size of this sub-sector.

Analysis of this issue, led by the Coherence Analysis Unit of Statistics Canada’s Enterprise Statistics Division resulted in guidelines for the stakeholders involved. Retail outlets of telecommunications service providers and their independent authorized dealers were to be classified in the retail industry. Furthermore, they were to report commission revenues for signing up customers for the telecommunication service and **exclude** the selling price of equipment owned by the telecommunications carrier in the retail turnover surveys. Instead, the equipment sales would be captured in the telecommunications providers’ survey.

As a result, cell phone retailers would report small amounts of revenues from the sale of accessories and an amount from commissions received from telecom service providers thus ensuring that the two components of the bundle – the good and the service were accounted for accurately. In turn, this treatment

⁹ The margin price is defined as follows: $\text{MarginPrice}_{\text{unit}}^t = \mathbf{P}^t_{\text{retail price/unit}} - \mathbf{P}^t_{\text{vendor price/unit}}$

would ensure that total output (*total operating revenues*) and gross margin figures accurately represented the retail services industry.

Figure 6 – Revenue breakdown of the annual retail trade survey¹⁰

B - Revenue (exclude GST/HST, PST and TVQ)		CAN\$
1. Sales of all goods purchased for resale, net of returns and discounts. Include parts used in generating repair and maintenance revenue (report the labour portion of repair and maintenance at question 5 below). Exclude sales and revenue from concessions.	2020	
2. Commission revenue and fees earned from selling merchandise on behalf of others. Include commission revenue from concessions.	2060	
3. Commission revenue and fees earned from selling services on behalf of others (e.g., lottery and bus tickets, phone cards)	2038	
4. Sales of goods manufactured as a secondary activity by this retailing business unit	2299	
5. Labour revenue from repair and maintenance (report parts at question 1 above)	2041	
6. Revenue from rental and leasing of goods and equipment	2037	
7. Revenue from rental of real estate	1009	
8. All other operating revenue (e.g., extended warranties, shipping and handling charges not included in the price of merchandise, placement fees). Exclude interest and dividend income; report these amounts at question 10 below.	2077	
9. Total operating revenue (sum of questions 1 to 8 above)	2080	
10. Non-operating revenue (e.g., interest and dividend income)	2097	
11. Total revenue (sum of questions 9 and 10 above)	2098	

Prices Survey – Retail Services Price Index (RSPI)

The retail service producer price index data for this industry is more granular compared to the aggregate turnover data and this often brings into focus pricing issues arising from the bundling of goods with services. These types of bundles are often selected for pricing by respondents in the electronics and appliance stores sub-sector.

It is common for retailers to market cell phones to customers at retail prices that are lower than vendor prices if bundled with telecommunication service contracts. Increasingly this is how cell phones are sold to consumers. For these types of transactions, telecommunications service providers may provide a commission to retailers per service contract which are recovered from the consumer over the course of the contract. This takes the form of the ‘cancellation fee’ consisting of the difference between the price that the consumer pays and the Manufacturer’s Suggested Retail Price (MSRP). This guideline is laid out in the CRTC Wireless Code introduced in 2013:

“The early cancellation fee must not exceed the value of the *device subsidy*¹¹” and the device subsidy is defined in the same code as “The difference between (i) the lesser of the manufacturer’s suggested retail price of a device or the price set for the device when it is

¹⁰ http://www23.statcan.gc.ca/imdb-bmdi/instrument/2447_Q1_V14-eng.pdf

¹¹ *The Wireless Code*, Page 72

purchased from the service provider without a contract; and (ii) the amount a customer paid for the device when they agreed to the contract.^{12,3}

As noted previously, service providers are also setting up retail stores which function as a direct marketing channel to consumers. This is in contrast to the indirect approach where independent “big box” electronic retailers take on the marketing, distribution and customer signup function at the behest of competing telecommunications service providers for a commission.

Bundled transactions of this nature have come to dominate the marketplace owing to their appeal to various participants and stakeholders:

- **Consumers** enjoy low initial device costs and the ability to upgrade to newer device at the end of the contract,
- **Retailers** benefit from increased walk-ins and foot traffic at the stores as consumers purchase popular new devices and related accessories,
- **Device vendors** benefit from efficient distribution channels that retailers offer for marketing new devices and
- **Telecommunications service providers** enjoy revenue stability and improved customer retention that come with multiyear service contracts.

It is possible for customers to purchase unlocked or unbundled cell phones; however, these are usually older generation phones with low volumes and often near the end of their product life cycle.

3.3 Implication for the RSPI

With a few exceptions, many of the high volume and latest generation cell phones are marketed to consumers at retail prices lower than vendor prices and locked in to multiyear contracts. When reporting for the survey, respondents rightfully select popular cell phones and report retail and vendor prices which for price index purposes result in negative margins. Primarily, this is because respondents are more familiar with store listed retail prices¹³ and secondarily, because respondents may not consider the commission received as part of the retail price.

In the context of the RSPI, negative margins are automatically excluded from index calculations and imputations are made for all such cases. For cases where only cell phones were priced, negative margins result in unusable data and in needless respondent burden. Cell phone accessories, if selected, ameliorate the situation as they do yield meaningful margins, but often they form a tiny portion of total sales.

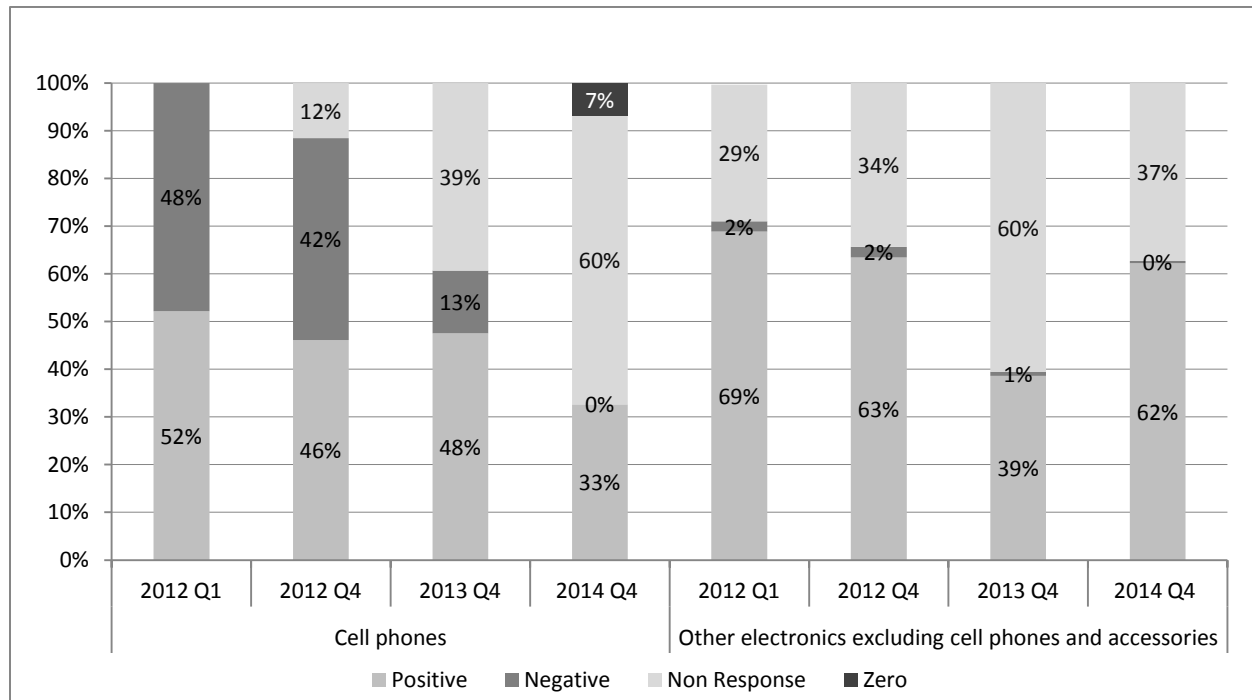
Analysis of the RSPI product sample for the electronics and appliance stores sub-sector illustrates the pervasive nature of negative margins for cell phones compared to all other electronics products.

¹² *The Wireless Code*, Page 76

¹³ The store listed retail price for a cell phone is the price a store would charge a consumer when bundled with a telecom service contract. For example a retailer may list a cell phone with a two year contract for \$300, even though the phone cost the retailer \$600.

Approximately 10% of all electronics products collected under the NAICS 443 can be identified as belonging in the generic “cell phones” category.

Figure 7 - Proportion of electronics products with positive or negative retail margins



From 2012 Q1, the proportion of reported cell phone prices yielding positive margins fell from just over 50% to lows of 30% in 2014Q4. These positive margin products are typically older generation devices not tied to any service bundle.

In contrast, negative margins are rarely encountered for all other electronic products in scope. Respondent frustration relating cell phone pricing can be deduced from the increasing proportion of the non response and zero margins categories for cell phones compared to the general electronic products.

3.4 Proposed solution to the bundling challenge:

In 2013, a sample top-up of the electronics and appliance stores sub sample (NAICS 443) was conducted to address sample attrition. At the onset of the top-up sample initialization it became apparent that reported cell phone prices continued to exhibit negative margins. Subject matter analysts revisited the issue and research was conducted to determine the best approach for collecting useable prices. A number of options were investigated and are listed below:

1. Continue accepting zero response or negative margins: This leads to unnecessary response burden as the respondent is reporting prices that are excluded from index. Long term imputation may also make the data non-representative of the industry.

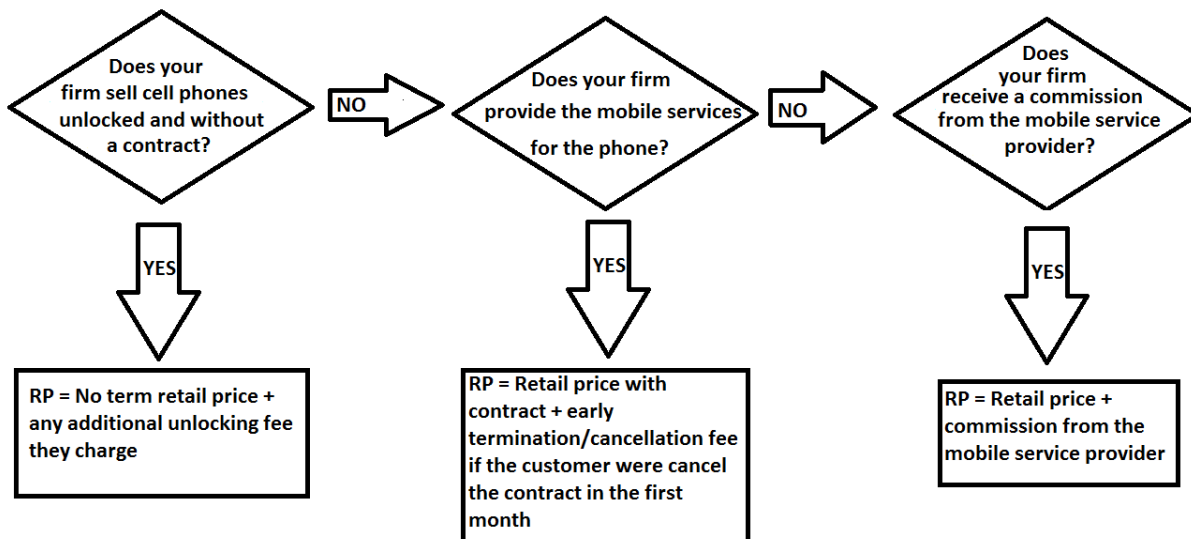
2. Treat cell phone and telecom service as one product: This would provide positive margins but it would also make the data noisier. It would not be representative of retail services as it would be an amalgamation of both the retail service of selling the phone and selling a telecommunications service which should not be captured by the RSPI.

3. Inform the respondent to provide the store listed price and the sales commission (if received):

This approach would require clarifying survey requirements at the initialization stage.

The third option was chosen and detailed instructions were provided to the initialization team and have been utilized on initialization phone calls with respondents with positive results. These instructions are presented in the following flow chart.

Figure 8 - Respondent initialization flow chart and interviewer notes, Cell Phones



Initialization Question Flow for Cellular Phone Retailers

Often, electronic stores (NAICS 443) sell cellular phones at a loss which for which they also get a commission from telecomm service providers. Respondents will then report cellular phone prices with negative margins (retail price < vendor price), which cannot be used in an index. There is likely hidden revenue in the form of commissions, as firms are unlikely to be losing money on each of these transactions. When calling respondents, please ask them the following questions:

1. Does your firm sell cell phones unlocked and without a contract?
 - If **Yes**, ask the respondent to report for the **no term retail price plus any additional unlocking fee they charge**.
 - If **No**, proceed to question 2.
2. Does your firm provide the mobile services for the phone?
 - This applies to the both the big and small scale telecommunications service providers, The legal or operating name of the sampled company should provide evidence for this classification.
 - If **Yes**, ask the respondent to report for the **retail price plus the early termination/cancellation fee if the customer were to cancel the contract in the first month**. This fee should decrease at a constant rate each month, so the respondent might understand it as a monthly fee. For example, if the early

termination fee was \$240 for a 2-year contract, the early termination fee would be \$20 for each month remaining on the contract. If the customer cancelled their contract in the first month, we would say there are 24 months left in the contract, so the total early termination fee would be the monthly fee x 24 months.

- If **No**, proceed to question 3.
- 3. Does your firm receive a commission from the telecommunications service provider or a third party for the sale of a cell phone?
 - The answer to this question should hopefully be **Yes**. Ask the respondent to report for the **retail price plus the commission from the mobile service provider**. This is likely the case for the “Big box” independent electronics retailers who themselves do not provide mobile services. From a consumer’s perspective, these firms are selling phones for comparable prices to telecommunications service retail stores. However, since they do not provide the cell phone services themselves, they will not receive money from a monthly contract. Therefore, they must receive some sort of commission from mobile providers, as there is no other incentive for them to sell cell phones at a loss.

4. Impact on the System of Macroeconomic Accounts

While it is unlikely that anything is lost or unmeasured in the Macroeconomic Accounts, bundling causes noise in price quantity measurement. It can impact the precision and granularity of details, or aggregation biases in the data used to assess economic efficiencies in a precise sector of the economy. The effect of errors in the allocation of total production between different products for bundled products on volume index and price index could be large, especially at the industry level. The volume index of output tends to be under-estimated while the price index over-estimated. In addition, decisions to bundle products will reduce the detail available for analysis.

4.1 Alignment of turnover data and price deflators

A key issue for National Accountants is the coherence between the turnover data output concept and that of the comparable SPPI. As noted in section 3, bundled prices for cell phones reported for in the Retail Services Price Index typically result in negative retail services margins which are excluded from the price index but are likely reflected in the turnover survey. Selecting less representative products from which to calculate the index could lead to a potential difference between price indexes that are used to deflate retail margins collected on turnover surveys in the calculation of real output levels.

There is already a bit of a mismatch between the Canadian SPPIs and turnover since most SPPIs are industry-based indexes rather than product-based indexes. To better associate the industry to the product, the SPPIs target the primary activity of an industry. But with bundling, that may not always be possible. In an industry such as NAICS 484 (ISIC H492) Hauling Goods via Truck, shipping freight via truck often includes loading and unloading at either end of the delivery. More frequently shipping companies also combine this service with storage to hold goods if the delivery date differs significantly from the pickup date. Where the secondary activities are bundled and reported as one price to the For Hire Motor Carrier Freight Services Price Index (FHMCFSPI), the trucking product may not align exactly with the deflator.

4.2 Product detail

From a production sense, GDP could be calculated with bundles of goods and services but doing so limits our ability to calculate detailed and accurate measures of productivity and efficiency. When goods and

services are bundled together, the margins in the distribution channel are blended with the service. Using the cell phone example, the supply of cell phones could be treated as part of a service. The cell phone could be considered necessary to deliver the telecomm service and could thus be considered an input into the production of the service. Rather than treating the phone and service as a bundled service, one could consider the cell phone as an item used to sell the telecommunications service.

Similarly, one could see the bundled service contract and cell phone as a service contract with a financial contract imbedded in it. The service contract is a way to amortize the value of the phone over the duration of the contract.

Following a production function, National Accountants put together resources (labour, capital, materials) to produce an output. The Canadian System of Macroeconomic Accounts (CSMA) uses a modified basic price by considering subsidies (such as those received by farmers) as impacting the market price of the product/service. Discounted cell phones to consumers could be similarly “subsidized” impacting the price of the telecommunications service.

From a transactional approach, one must ask whether each service requires different resources to produce or are firms differentiating products in order to maximize revenue? With more granular supply use data, researchers can better evaluate productivity improvements and the overall economic impact of the expansion of a particular industry.

5. Conclusion

There is no single solution to the issue of bundling. It can be treated in product and industry classification or carefully teased out of turnover and price surveys. A sharing of specific practices across programs and statistical offices can help NSOs develop a suite of tools to handle this complex issue. Most important is the use of consistent approaches for individual products or industries throughout a country’s statistical system to ensure coherent data to measure the real value of services outputs.

References

Berger, Matt (2008) Addressing cross-cutting issues arising in the development of SPPIs for use in the measurement of Services Sector GDP. Paper updated for the 23rd Voorburg Group meeting 2008 <http://voorburg/Documents/2008%20Agascalientes/Papers/2008%20-%2021.pdf>

Canadian Radio-television and Telecommunications Commission, Communications Monitoring Report, October 2014. <http://www.crtc.gc.ca/eng/publications/reports/PolicyMonitoring/2014/cmr.htm>

Garneau, M.B. *Retail Trade in Canada Turnover/Output Measures and Practices in Canada*. 25th Voorburg Group Meeting 2010. <http://voorburg/Documents/2010%20Vienna/Papers/2010%20-%2063.pdf>

Garneau, M.B.; Galais, A.; Kaumanns, S.; Murphy, B. et al. (2012) Final Issues Paper on: Section G of ISIC (rev 4) Wholesale and retail trade; repair of motor vehicles and motorcycles. Paper for Voorburg Group meeting 2012. http://voorburg/Documents/2012%20Warsaw/Papers/1012%20-%20dt_issues_paper_vg2012.pdf

Higgins, M. *When a vacation package can save you money (and when it can't)*. New York Times. http://www.nytimes.com/2011/02/27/travel/27prac-vacationpackage.html?_r=0. Accessed June 30th 2015

Murphy, John, (2015) Service Products and Pricing Bundles – Discussion Paper on Treatment in Classification, Output Statistics and SPPIs. Paper for Voorburg Group meeting 2015.

Quarterly Survey of Telecommunications, Statistics Canada
<http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=2721>

Statistics Canada, Annual Survey of Telecommunications <http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=2722>

Statistics Canada, Survey of Household Spending,
<http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=3508>

Statistics Canada. *Table 356-0004 - Telecommunications statistics, by operating and financial detail and North American Industry Classification (NAICS), annual (dollars unless otherwise noted)*, CANSIM (database). (accessed: 2015-08-15)

Statistics Canada. *Table 080-0020 - Retail trade, sales by the North American Industry Classification System (NAICS), monthly (dollars)*, CANSIM (database). (accessed: 2015-05-26)

Statistics Canada. *Table 282-0008 - Labour force survey estimates (LFS), by North American Industry Classification System (NAICS), sex and age group, annual (persons unless otherwise noted)*, CANSIM (database). (accessed: 2015-05-26)

The Wireless Code, Telecom Regulatory Policy CRTC 2013-271, 3 June 2013. Accessed August 18th 2015

Appendix A

Economic sectors or activities where bundles are involved

Accounting (General, Bookkeeping, Tax preparation and representation services)
Advertising/Marketing
Armored car services
Assisted daily living services
Business support services (Transportation, Facilities, etc.)
Construction/buildings/Home (and related services)
Engineering services
Financial and insurance services
Funeral services
Geophysical data services
Geospatial data services
Hair care services
Handling and packing and related services for goods
Head-Office services
Health Care
Installation services
Intellectual property
Interior design services
IT design and development services
Legal services
Maintenance and repair
Management services (Career, Finance, HR, Marketing, Operations and supply chain, Strategic)
Membership-type organizations services
Parking services
Publication/Information/Media
Recreational activities
Rental or leasing
Social events services
Sound production and recording services
Sporting events
Support services for education
Telecommunications
Tourism
Transportation (passengers and goods/freight)
Warehousing and storage services
Waste management services
Webhosting services (IT)

Appendix B

Line	Economic sector	Description of the bundle/s in NAPCS
1	Accounting/Bookkeeping	Bundled bookkeeping and compilation service. Bookkeeping services may include payroll calculation services.
2	Accounting/General	Bundle of general accounting services that includes combinations of some or all of the following for a single fee: bookkeeping, compilation, payroll, and tax preparation services
3	Accounting/Tax preparation and representation services	Compilation of financial statements when bundled with tax preparation services for a single fee
4	Advertising	<p>Creation and design of advertisements when bundled with providing advertising space in printed publications</p> <p>Production of television commercial messages and other advertisements when bundled with providing air time for broadcasting of such content</p> <p>Production of radio commercial messages and other advertisements when bundled with providing air time for broadcasting of such content</p> <p>Creation and design of advertisements when bundled with the provision of advertising space over the Internet</p> <p>Creation and design of advertisements when bundled with providing advertising space</p> <p>Bundle of advertising services that may include some or all creative and productive services for advertisements and media planning, buying, and research services.</p> <p>Developing a comprehensive strategy to send promotional messages directly to consumers, rather than via mass media. May include Includes implementing a variety of marketing methods, such as direct mail, telemarketing, distribution of advertising materials and advertising specialties other than by mail, and product demonstrations</p> <p>All the services of a direct mail advertising campaign from the concept development through the actual mailout. Includes: Identifying the target group, developing the strategy, designing the mailout package, printing and assembling the package, and mailing the package</p> <p>Developing and producing a complete advertisement or advertising campaign other than direct mail and direct marketing, including advertising graphic design</p>
5	Armored car services	Cash management and handling services bundled with armored car services
6	Assisted daily living services	<p>Independent-living services - The bundle generally includes rental of apartment or room space with monitoring or emergency-call services, a meal plan (e.g., 10 meals per month, 1 per day, 3 per day), and periodic assistance with living and health care requirements. May also include parking, provision of transportation, entertainment, and personal and beauty care facilities.</p> <p>Bundled service to residents of custodial care facilities who require daily living assistance. The bundle generally includes rental of room space with regular monitoring, meals, assistance with daily living, and designated medical services</p> <p>Bundled service to residents of custodial care facilities who require daily living assistance, rehabilitation, and therapy services. The bundle generally includes rental of room space with regular monitoring, meals, assistance with daily living, mental or physical and/or occupational rehabilitation and therapy services, and other designated medical services.</p> <p>Bundled service to residents of custodial care facilities who require behavioral remediation. The bundle generally includes rental of room space with regular monitoring, meals, assistance with daily living, counseling services, and designated medical services. Counseling services include programs to develop daily life management, personal financial management, and household and job seeking skills.</p>

		Bundled service to residents of custodial health care facilities who require daily nursing care, without rehabilitation services. The bundle generally includes rental of room space with regular monitoring, meals, assistance with daily living, skilled nursing, and other designated medical services
		Bundled service to residents of custodial health care facilities who require daily nursing care and mental or physical rehabilitation. The bundle generally includes rental of room space with regular monitoring, meals, assistance with daily living, skilled nursing, rehabilitation services, and other designated medical services.
7	Automobiles and trucks	Automobiles - Parts bundled with maintenance and repair services
8	Business support services/Air Transportation	Bundle of support services for small, private aircraft, which are usually not operating as a scheduled airline. These services are typically offered by a Fixed-Base Operator (FBO) establishment, often operating within a larger airport, typically on a membership, subscription, or contract basis. The bundle typically includes aircraft parking or hangar storage or both; refueling service (but not provision of fuel); flight planning and weather information; assistance in the loading and unloading passengers, baggage and crew; assistance in aircraft turn-arounds and pre-flight checks; arrangement of ground transportation and accommodation; handling and arrangement of regulatory paperwork; as well as use of conference rooms and lounge facilities, often including showers, kitchenettes, and entertainment equipment.
9	Business support services/Facility support	Bundle of services to manage and service a facility, which the client uses to carry out its own activity. With the exception of correctional facilities contract operation services, the services provided are "non-core" with respect to the client's activity. The bundle of services is generally customized, but may include administrative, security, mail room, grounds keeping, janitorial, and arrangement of garbage removal, etc.
10	Business support services/Rail transportation	Renting and leasing of freight railcars bundled with switching services
11	Construction/buildings	Architecture - Providing designs, construction documents, consulting, and construction contract administration services for a specific project as a bundle of services under a single contract.
		Landscaping - Providing designs, construction documents, consulting, and construction contract administration services for a specific project as a bundle of services under a single contract.
		Interior decorating services bundled with interior design
		Architectural services/Non residential - Designs, construction documents, consulting and construction contract administration services for a specific project, offered as bundle of services under a single contract
12	Construction/Home	Visual examination of a residential property, combined with assessing the level of activity and extent of damage caused by termites, fungi, or other wood-destroying pests
13	Engineering services	Engineering services- Providing designs, plans, and studies and other engineering consulting services related to engineering projects, offered as a bundle of services under a single contract
		Engineering services/Petroleum and petrochemical plants - Designs, plans, and studies and other engineering consulting services related to petroleum and petrochemical plant and process engineering projects, offered as bundle of services under a single contract
		Engineering services/Manufacturing and industrial plants - Designs, plans, and studies and other engineering consulting services related to petroleum and petrochemical plant and process engineering projects, offered as bundle of services under a single contract
		Engineering services/Manufacturing and industrial plants - Designs, plans, and studies and other engineering consulting services related to petroleum and petrochemical plant and process engineering projects, offered as bundle of services under a single contract

		Engineering services/Transportation projects - Designs, plans, and studies and other engineering consulting services related to petroleum and petrochemical plant and process engineering projects, offered as bundle of services under a single contract
		Engineering services/Municipal utility projects - Designs, plans, and studies and other engineering consulting services related to petroleum and petrochemical plant and process engineering projects, offered as bundle of services under a single contract
14	Financial and insurance services	Bundle of deposit account-related services, such as checks, account statements, ATM transactions, etc., provided for a flat fee, usually paid monthly. May also include non-deposit services, such as travelers' checks
15	Funeral services	Pre-burial services as part of a bundled service
		Cremation services as part of a bundled service
		Interment services as part of a bundled service
		Bundled services for the care and disposition of human remains. The bundle may include preparation of the body, arrangement and/or management of services, and cremation or burial of the remains
16	Geophysical data services	Collecting geophysical data bundled with processing and/or analyzing the data
		Bundle of services that includes two or more phases of the process used to carry out geophysical surveys (acquisition, processing, interpretation)
		Bundle of geophysical services that includes collecting, processing, and/or analyzing borehole geophysical data
17	Geospatial services	Consulting services bundled with a particular surveying and mapping project
18	Hair care services	Trimming beards and mustaches and other services bundled with hair cutting services, such as shampooing, blow drying, and styling
19	Handling and packing and related services for goods	Product assembly, package design, printing labels, and bar coding when bundled with packaging services
		Bundled fulfillment and duplication services for audiovisual works
		Fulfillment services that generally include storage, processing of orders (gathering and packing items ordered), shipping, billing, collecting payments for the order, and handling returns and exchanges
20	Head-Office services	A package of services provided by the head office of an enterprise to other units of the enterprise
21	Health Care	Intermittent/part-time bundle of medical and support services which are specified by a physician in a Plan of Care (POC) and delivered within the client's residence
22	Installation services	Installation and repair of nonresidential building lock and security systems, without monitoring services.
23	Intellectual property	Performances provided under contracts that bundle performance and intellectual property licensing services
		Licensing of rights to use intellectual property protected by patent, trade secret, or copyright law when bundled within the franchising agreement
24	Interior design services	Interior decorating services when bundled with interior design services
25	IT design and development services	Advice bundled with the design and development of an IT solution (web site, database, specific application, network, etc.)
26	Legal services	Handwriting analysis included in a bundle of investigative services
27	Maintenance and repair	Sales of parts bundled with maintenance and repair services
		Home furniture and furnishings cleaning - Parts bundled with maintenance and repair services
		Home appliances - Parts bundled with maintenance and repair services
		Other household goods - Parts bundled with maintenance and repair services

		Home audio and video equipment - Parts bundled with maintenance and repair services
		Motorcycles, scooters, bikes - Parts bundled with maintenance and repair services
		Boats and other sports vehicles - Parts bundled with maintenance and repair services
		Recreational, sports and fitness equipment - Parts bundled with maintenance and repair services
		Motor homes, travel trailers, campers - Parts bundled with maintenance and repair services
		Motor homes, travel trailers, campers - Parts bundled with maintenance and repair services
		Parts or software bundled with office equipment maintenance and repair services, May also include installation of replacement parts for office equipment
		Computer hardware - Parts or software bundled with office equipment maintenance and repair services, May also include installation of replacement parts for office equipment
		Communications and navigation equipment - Parts or software bundled with office equipment maintenance and repair services, May also include installation of replacement parts for office equipment
		Data back-up services bundled with maintenance and repair services for computer hardware
		IT technical support bundled with maintenance and repair services for computer hardware
28	Management services/Career	Representation services bundled with career management services
29	Management services/Finance	Advice, guidance, or solution implementation services concerning financial strategies, planning and control for a business or government client, including designing and managing a portfolio of investments. These services can be provided separately or as part of a bundle
30	Management services/Full	Bundled service package that combines information-technology-intensive services with labor (manual or professional depending on the solution), machinery, and facilities to support, host, and manage a business process for a client
31	Management services/HR	Advice, guidance, or solution implementation services concerning the development or modification of human resources strategies, policies, practices, and procedures. These services can be provided separately or as part of a bundle.
32	Management services/Marketing	Advice, guidance, or solution implementation services on projects related to marketing strategy, market development, and sales management and development. These services can be provided separately or as part of a bundle
33	Management services/Operations and supply chain	Advice, guidance, or solution implementation services concerning operations and supply chain management. These services can be provided separately or as part of a bundle.
34	Management services/Strategic	Advice and guidance or solution implementation services concerning the overall strategic direction, planning, structuring and control of an organization. These services can be provided separately or as part of a bundle
35	Membership-type organizations	Bundle of services offered by performing arts societies, clubs, museums, historical sites, zoos, botanical gardens and natural area organizations to members in exchange for payment of nonrefundable initiation fees and/or annual membership dues.
		Bundle of services offered by civic and social organizations to members in exchange for payment of nonrefundable initiation fees and/or annual membership dues. The bundle may include the right to participate in member events and decision-making activities of the organization; the use of organization facilities; the provision of organization newsletters and publications; and services such as arranging for and providing access to specific goods and services at discounted prices.

		<p>Bundle of services offered by organizations (other than labor unions, civic and social organizations, performing arts societies and clubs, museums, historical sites, zoos, botanical gardens, natural area organizations, or business and professional associations) to members, in exchange for membership dues and similar payments. The bundle may include the right to participate in member events and decision-making activities of the organization; the use organization facilities; the provision of organization newsletters and publications; and services such as arranging for and providing access to specific goods and services at discounted prices.</p> <p>Bundle of services offered by business and professional associations to members in exchange for payment of nonrefundable initiation fees and/or annual membership dues. The bundle may include representing and/or lobbying for the interests of members in private and government forums; disseminating issue information to and polling of members; and organizing membership meetings and conventions. The bundle may also include the right to participate in membership events and decision-making activities of the organization; the provision of organization newsletters and publications; and the provision of additional services such as arranging for and providing access to specific goods and services at discounted prices.</p>
36	Parking services	Providing space bundled with an automobile parking service ("valet service")
37	Publication/Information/Media	<p>Children's book bundled with toy kits</p> <p>Technical services related to publishing, such as editing, proofreading, content development, research and writing, and word processing, bundled with publishing services</p> <p>Printing and distribution services bundled with publishing services</p> <p>Video streaming services, streaming encoding, and related support services provided as a combined bundle</p>
38	Recreational activities	Overnight recreational camp accommodation bundled with food services, use of recreational equipment, etc.
39	Rental or leasing	<p>Rental of formal wear, costumes, and accessories, bundled with delivery/pick-up, insurance (e.g., property, liability, warranty, and damage waiver), alterations, and maintenance and repair (in a single rental agreement)</p> <p>Maintenance and repair services bundled with rental and leasing of apparel</p> <p>Rental of residential space bundled with additional services (parking, recreational amenities)</p> <p>Renting and leasing of security systems bundled with monitoring services</p> <p>Home furniture and furnishings - Delivery/pick-up, insurance (e.g., property, liability, warranty, and damage waiver), and maintenance and repair when bundled with the rental or lease agreement</p> <p>Home appliances - Delivery/pick-up, insurance (e.g., property, liability, warranty, and damage waiver), and maintenance and repair when bundled with the rental or lease agreement</p> <p>Home tools and DIY equipment - Delivery/pick-up, insurance (e.g., property, liability, warranty, and damage waiver), and maintenance and repair when bundled with the rental or lease agreement</p> <p>Other household goods - Delivery/pick-up, insurance (e.g., property, liability, warranty, and damage waiver), and maintenance and repair when bundled with the rental or lease agreement</p> <p>Home audiovisual equipment - Delivery/pick-up, insurance (e.g., property, liability, warranty, and damage waiver), and maintenance and repair when bundled with the rental or lease agreement</p> <p>Pre-recorded entertainment on physical media or video games - Delivery/pick-up, insurance (e.g., property, liability, warranty, and damage waiver), and maintenance and repair when bundled with the rental or lease agreement</p>

		Recreational, sports and fitness equipment - Delivery/pick-up, insurance (e.g., property, liability, warranty, and damage waiver), and maintenance and repair when bundled with the rental or lease agreement
		Motor homes, travel trailers, campers - Delivery/pick-up, insurance (e.g., property, liability, warranty, and damage waiver), and maintenance and repair when bundled with the rental or lease agreement.
		Automobiles and light trucks - Delivery/pick-up, insurance (e.g., property, liability, warranty, and damage waiver), and maintenance and repair when bundled with the rental or lease agreement
		Accommodation for travelers - Sleeping facilities may be bundled with related services such as parking, meals, etc.
		Recreational vehicle site rentals bundled with sewage, water, electricity, television and similar services
		Renting and leasing of security systems bundled with monitoring services. May include installation, maintenance, and repair of the equipment.
		Office equipment - Delivery/pick-up, insurance (e.g., property, liability, warranty, and damage waiver), and maintenance and repair when bundled with the rental or lease agreement.
		Communications equipment - Delivery/pick-up, insurance (e.g., property, liability, warranty, and damage waiver) when bundled with the rental or lease agreement Maintenance and repair of equipment when bundled with the rental or lease agreement
		Heavy trucks, truck trailers, buses - Delivery/pick-up, insurance (e.g., property, liability, warranty, and damage waiver), and maintenance and repair when bundled with the rental or lease agreement.
40	Social events services	Corporate packages, birthday party packages, and similar bundles of golfing, food and beverages
		Corporate packages, birthday party packages, and similar bundles of golfing, food and beverages
		Corporate packages, birthday party packages, and similar bundles of golfing, food and beverages
		Corporate packages, birthday party packages, and similar bundles of golfing, food and beverages
		Providing a bundle of entertainment and recreational services for a group of people, including the use of a facility's attractions (such as rides and games at amusement parks, theme parks, and amusement arcades, and use of bowling alley facilities), additional entertainment (such as clowns), and/or food and beverage services
		Children's party packages
		Business/corporate event packages
41	Sound production and recording services	Licensing and/or agent services for licensing of music and sound bundled with mixing or integration services into an audiovisual work
		Radio and audio program sound recording, sound editing and mastering, music track insertion, and master reproduction, provided in combination
42	Sporting events	Bundles of admissions to live sports events with food and beverage service
43	Support services for education	This may include advice and guidance services bundled with implementation services
44	Telecommunications	Services bundled with Internet access, such as e-mail, space for the customer's web page, tools for simple web page design, chat, and technical support.
		Remote access or other types of Internet access and package upgrades such as international roaming, extra e-mail boxes, etc., whether bundled or provided for an additional fee
45	Tourism	Guide services provided as part of a bundle of sightseeing, recreational services or

		<p>package tour</p> <p>Tour packages that bundle cruises with transportation to and from the departure or arrival ports and/or pre- or post-cruise hotel accommodation</p> <p>Tour packages include transportation bundled with overnight accommodation and any or all of the following services: tourist visas, entertainment, meals, and sightseeing, commentary, admission to sights, or guided visits.</p>
46	Transportation/Goods	<p>Transportation of bundled mail, bundled sets of documents, or bundled small packages between transportation hubs</p> <p>Freight transportation arrangement services bundled with load finding services</p>
47	Transportation/Passengers	<p>Providing tour packages with transportation by bus or other road vehicles bundled with overnight accommodation</p> <p>Providing tour packages with transportation by bus or other road vehicles bundled with overnight accommodation</p> <p>Passenger transportation on cargo ships, which includes accommodation and meals but not all the amenities of a cruise</p> <p>Providing tour packages with transportation by bus or other road vehicles bundled with overnight accommodation</p> <p>Providing tour packages with transportation by bus or other road vehicles bundled with overnight accommodation</p> <p>On-board catering, on-board telecommunications arrangement, post-trip arrangement of ground transportation and accommodation, and other services bundled with the air transportation service</p> <p>On-board catering, on-board telecommunications arrangement, post-trip arrangement of ground transportation and accommodation, and other services bundled with the air transportation service</p> <p>Providing tour packages with sightseeing transportation by water bundled with overnight accommodation on shore</p> <p>On-board catering, on-board telecommunications arrangement, post-trip arrangement of ground transportation and accommodation, and other services bundled with the air transportation service</p> <p>On-board catering, on-board telecommunications arrangement, and other services (e.g., post-trip arrangement of ground transportation and accommodation) bundled with the air transportation service.</p> <p>Providing tour packages with sightseeing transportation by water bundled with overnight accommodation on shore</p> <p>Sightseeing services may include prepared meals, entertainment, commentary, admissions to attractions, guided visits, and pre- or post-trip transportation, but does not include overnight accommodation</p> <p>Sightseeing services may include prepared meals, entertainment, commentary, admissions to attractions, guided visits, and pre- or post-trip transportation, but does not include overnight accommodation</p> <p>Sightseeing services may include prepared meals, entertainment, commentary, admissions to attractions, guided visits, and pre- or post-trip transportation, but does not include overnight accommodation</p> <p>Sightseeing services may include prepared meals, entertainment, commentary, admissions to attractions, guided visits, and pre- or post-trip transportation, but does not include overnight accommodation</p>
48	Warehousing and storage services	Storage services for goods, bundled with any or all of the following: handling services (e.g., loading, unloading, transferring, and cross-docking), preparation services for transportation and/or storage (e.g., packaging, packing, labeling, stenciling, assembling, fumigating, blast and slow freezing), inventory management services, and freight transportation arrangement and customs brokering services
49	Waste management	Collection services bundled with destruction services for documents and files /

	services	Residential
		Collection services bundled with destruction services for documents and files / Non Residential
		Collection services bundled with destruction services
50	Webhosting services	Bundled service package (including consulting, customization, and systems integration services) that consists of the hosting and management of the web site and related applications