

CONTRACTING OUT

by

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Introduction

1. In current discussions on the state and prospects of the economy, there are three propositions in wide circulation. At times they are taken for granted; but, the evidence for them is not always clear.
2. First, there is the claim that the output of service industries- however defined represents well over half of GDP and almost three quarters of total employment and that this represents a marked change. Secondly, there is the counter claim that this is not a fundamental change insofar as many of the service outputs which are now measured, used to be performed on own account by the goods producing sector. And thirdly, there is the claim that since many services are provided by small business units, their net growth is consistent with the observation that most employment creation in recent years originated in small business.
3. The purpose of this paper is to outline a series of steps that Statistics Canada proposes to take in order to test the proposition in its extreme form that no business services have been created but rather they represent a trend towards contracting out. If this proposition is borne out by evidence it follows that our means of measuring business

services were at fault prior to contracting out and that current trends observed in this sector are no more than a different way for business to carry on its activities. Moreover, whether or not small business is at the root of recent employment creation is immaterial insofar as it can only function to the extent it provides traditional services to equally traditionally established goods producing business.

4. The point of reporting on this project is that it must use the output classification that was agreed to be developed by the ad hoc meeting on services statistics convened earlier this year in Voorburg. This would constitute an immediate application of the classification and one whose relevance cannot be over-emphasized.

Procedure

5. The procedure to be outlined requires the following elements
 - a. Output classification and target units;
 - b. Vehicle;
 - c. Metric; and
 - d. Linkage to other business characteristics.
6. These elements will be discussed in turn after disposing of two definitional issues. "Contracting out" is defined as a transaction that crosses the boundaries of an enterprise,

the latter being understood as the smallest set of productive operations under common ownership and control, capable of reporting a full and consolidated balance sheet. By opposition, "own account" is defined as referring to transactions that take place within the enterprise's boundaries whether within the same producing unit or among different producing units under the same ownership and control.

a. Output classification and target units

7. A first and aggregated list of services is attached to this paper. (see attachment 2) This is not to be interpreted as a final classification. Literally, its purpose is to get a foot in the door. The idea is to select a sample of large and complex businesses and through either interview or mail questionnaire ascertain which of the service outputs listed are provided by the unit and if so which are purchased and which are produced on own account. Obviously, one of the possible and even likely results is that the list of services employed is neither complete nor unambiguous. But since this is no more than a first stage in the process, refining this list to the point where it becomes operational is an important step forward.
8. The target for the classification is either the business head office or its ancillary units. There should be no surprising results insofar as these are the units which are presumed to

buy, make, and deliver the services necessary for the business to operate. But the knowledge that has to be acquired formally and systematically is how these units are structured and how they operate vis a vis the rest of the enterprise.

b. Vehicle

9. Traditionally there have been two classes of business surveys. Unfortunately, neither is adequate. The first, is the class of surveys designed to measure the financial position of the enterprise as a whole. The merit of these surveys is that they relate to the whole rather than to a single part of the enterprise. But their disadvantage is that they are not designed to measure transactions within the business and are probably addressed to the wrong organizational unit within the enterprise.
10. The second class of surveys consists in the ones designed to produce industrial statistics. In principle, these surveys are better geared for the purpose at hand except that they are addressed to the management of productive units. They neither see the business as a whole nor are they apt to measure intra company flows of services. There is nothing intrinsic in this in the sense that if re-designed these surveys might provide the missing information. But as a matter of fact they cannot do so now and have not done so in the past.

11. There is however a third class of survey that fits the bill, at least initially. These are the surveys designed for the delineation of the structure of a business. They are addressed to head offices and concentrate on the boundaries of the enterprise, its constituent elements and how the various accounts support the relationships that may exist among the various components of the business. In Canada, these surveys, variously conducted by mail, telephone and personal interview are known as "profiling" and their results form the backbone of the business directory from which all business surveys are driven.

12. Profiling can be used effectively to find out at least which services are provided, purchased and produced on own account. Initial experiments suggest that this is feasible and that it is not perceived as inflicting undue response burden. In the months to come this proposition will be better tested. Attachment 1 is a simple version of the kind of question that might be included in a profile, to determine the presence or absence and the origin of services provided.

c. Metric

13. This will be needed to compare services "made" with services "bought". In fact, given a set of internal costs and external prices there must be a point in an enterprise's production function where it is indifferent between making

and buying. But to measure shifts, trends, and to assess even if only qualitatively whether marketed services to business are the same as own account, a metric is required. Such a metric can only be developed to the extent that it is supported by business accounts. And this in turn is another test for the initial version of the classification.

14. In an ideal situation, the enterprise would maintain detailed price and quantity records of the services provided to itself and would ensure that prices were market rather than notional prices developed purely for purposes of internal management. If such records existed for each of the services mentioned in the form in attachment 2, their exploitation would provide information on size, change over time, and if a shift between "making" and "buying" took place, an immediate measure of the effect of the shift in value terms.
15. In practice, this is not going to be the case. At best, enterprises may have personnel records for the in house services, from which one might derive size measured through the payroll; and perhaps a finer information through the occupational characteristics of the personnel involved. Whether the records exist and if so to which extent they are accessible remains to be examined.
16. The ideal type of information would also provide the basis to estimate cost structures for the productive units of the

enterprise and these structures could be re-estimated if a shift between making and buying took place. But the chances are that such structures will have to be created by statisticians on the basis of whatever indirect indicators are judged appropriate.

d. Linkage to other business characteristics

17. In addition to the obvious linkages, there are two kinds of linkages that will have to be worked out. One is historical and at the level of aggregated data. The other is at micro-data level. In order to study either of them, the businesses profiled must give an indication of which services they made and bought at some previous period. Actually, the study of trends would improve further if an additional question on plans for making or buying given a stated time horizon were asked.
18. If a business claims that it makes $x(t)$ and buys $y(t)$ and that it made $x(t-1)$ and bought $y(t-1)$ the shift $d(t)$ should have an impact on the business cost structure. Experience will show to which extent such a change is detectable in the midst of all the other changes that may have occurred during the period under observation.
19. If an aggregate of businesses claims that for the service i there has been a move away from making and towards buying, this should be detectable in the growth of marketed activity

of service i or indirectly in the sales of the industry whose chief output is i. If there is a metric that suggests the value of the service i when it was produced on own account, that could be compared with the change in sales of product i. These are tentative comparisons required to back up or contradict the initial propositions.

20. Of course there are the obvious linkages to known characteristics of the businesses profiled. These businesses have industrial and geographical classifications and their financial and industrial returns are on record. Accordingly, patterns of making and buying can be associated with industrial activity, size, and access.

21. A small test was conducted with seven head offices of firms in manufacturing and wholesale as well as in engineering, architectural and computer services.

The results of this limited test displayed in attachment 3 shows that it will be feasible to identify effectively which services are provided, purchased and produced on own account in a profiling activity as described above in 11 and 12.

Conclusions

22. The coming few months are going to witness to which extent this procedure is amenable to yielding interesting results in the short run. If so, the impact on the understanding of major trends in the Canadian- and by extension in developed countries'- economy could be very significant. In the meantime there is the classification to test and there is also an invitation for other countries to contribute their experience or a prior knowledge of these matters.

Attachment I

How do you obtain the following services?

Type of Service	We produce the service in house	We buy the service on the market from another firm	We obtain the service from another branch office of our firm	Not applicable
Consulting and Other Professional Services				
Legal Services				
Engineering Services				
Management and Information Services				
Computer Services				
Financial				
Accounting				
Billing				
Payroll				
Advertising Services				
Transportation Services				
Truck				
Freight				
Warehousing/Inventory Control				
Rentals				
Space				
Equipment				
Other Services				

Attachment II

OTHER CHARACTERISTICS - Head Offices

TYPE OF SERVICE	TYPE OF SERVICE
Accounting Services Financial Auditing Compilation Review Accounting & Taxation Other	Computing and Data Processing Services Data Base Services Computer and Software Consultancy Data Processing Services Turnkey Systems Software Supply Maintenance and Repair of Computer Systems
Bookkeeping Services	Technical Services Architectural Services Engineering Services Integrated Engineering Services Urban Planning and Landscape Architectural Services Related Scientific and Technical Consulting Services Technical Testing and Analysis Services
Taxation Services Corporate Tax Planning & Consulting Corporate Tax Preparation & Review Other Tax Related	Research and Development Research and Development Services Basic Research Applied Research Experimental Development
Management Consulting Services General Management Consulting Financial Management Consulting Marketing Management Consulting Human Resources Management Consulting Production Management Consulting Public Relations Services Other Management Consulting	Photographic Commercial Photograph Services Photograph and Motion Picture Processing Services
Services Related to Management Consulting Market Research Services Economic & Social Intelligence Services Project Management Services Arbitration and Conciliation Services Other	Inspection Services
Personnel Services	Rental and Leasing
Office Services Secretarial Stenographic Text Processing, Duplicating Addressing, Mailing, and Other General Office Services	Real Estate Services Property Management Real Estate Development
Legal Services Legal Representation Services Legal Advisory and Counselling Services Other Legal Services	Insurance Services Self-Insurance Services
Security and Investigation Services Detective and Protective Services	Health and Social Services Medical Practice Services Other Health Services Child Day Care Services
Advertising and Promotion Services Advertising Placement Services Other Advertising Services Graphics Design	Training Services Technical and Vocational Education Other Education Services
Marketing Services Wholesale Retail	Actuarial Services
Inventory Control Services	Financial Services Financial Intermediation and Related Services
Distribution Services	Investment Services Investment Management Services Holding Companies (Non-operating) Investment Management Services Other Investment Services
Communication and Information Services Broadcast Communication Activities Operation and Maintenance of Transmission Facilities	Other Business Services Customs Brokers Freight Forwarders Interior Design

Attachment III

How do you obtain the following services?

Type of Service	We produce the service in house	We buy the service on the market from another firm	We obtain the service from another branch office of our firm	Not applicable
Consulting and Other Professional Services				
Legal Services	1	2		4
Engineering Services	1	1	1	4
Management and Information Services				
Computer Services	3	2	2	-
Financial				
Accounting	2	4	1	-
Billing				
Payroll				
Advertising Services	1	2	1	3
Transportation Services				
Truck	2	4	-	1
Freight				
Purchasing/Inventory Control	-	1	1	5
Rentals				
Space	5	2	-	-
Equipment				
Other Services				