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Rental and leasing: asset value and adjusting for quality change

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Structure of the presentation

1. What is the output of rental and leasing?
2. How is this treated in the 2008 SNA?
3. What should be included in the quality change of rental and leasing?
4. Consistency of production functions and double counting in GDP.
5. Pricing mechanisms and pricing methods: limitation to the ideal quality adjustment on the good rented.
6. Use of S-PPI by national accounts.
7. A life for S-PPI outside the concepts of national accounts?



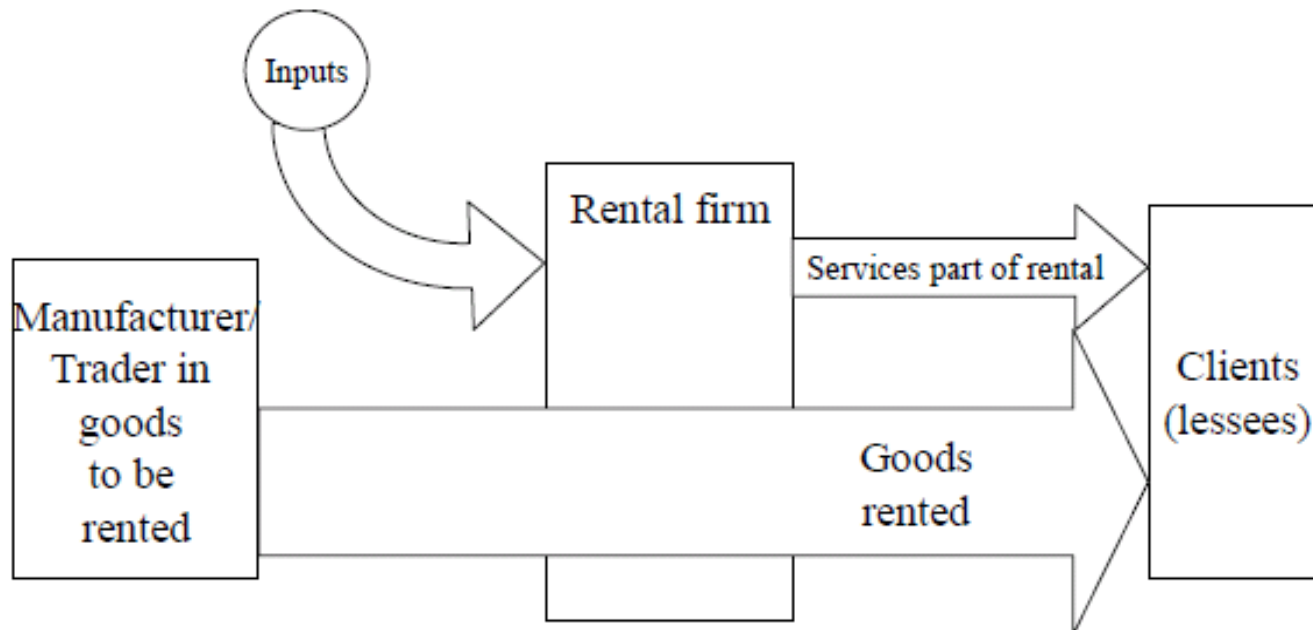
1. What is the output of rental and leasing?

- › During the 20th meeting of the Voorburg Group, held in Helsinki in 2005, several contributions exposed the ambiguity of this service industry, closely linked to goods (rented).
- › Aurél Kenessey (CBS, Netherlands) exposed 3 possible approaches with impacts on quality adjustment, 2 of which are considered here:
 - “net service”, the quality of the good rented had to be excluded;
 - “bundle of service and good rented”, quality of the good must be considered for the “good” part of the bundle.
- › Michael Holdway (BLS, United States) advocated treating leasing (not rental) output as an intermediation service margin (like retail trade or banking).



1. The “net approach”

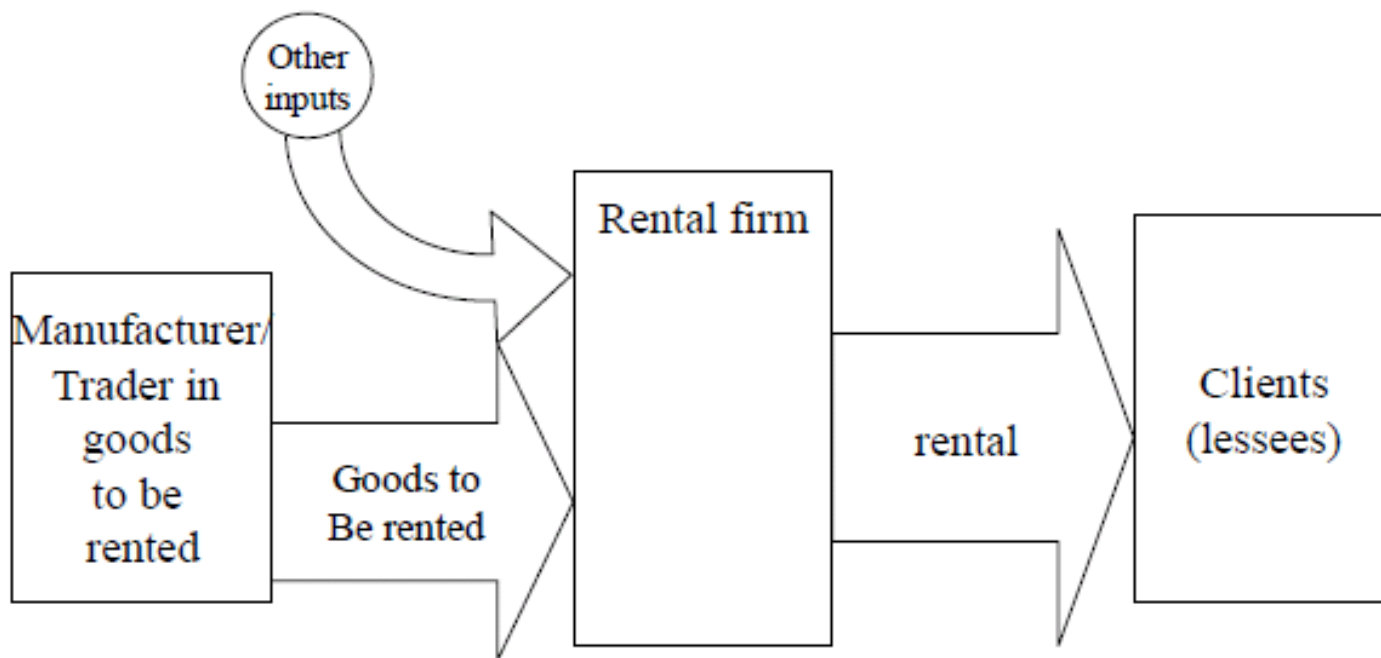
- › The output is the “pure” service with the “cost of the good” (“its depreciation”, and perhaps other costs) netted out.
- › In a complete picture of the economic flows, the good rented would be shown as a direct purchase of the good by the lessee and not the lessor. The “net” rental transaction would be shown between the lessor and lessee.
- › Michael Holdway notes that the good is naturally in the “features” of the leasing output and that this is problematic because it should not be taken into account for the quality of the net service.





1. The bundle of the good rented and a rental service

- › The “gross rental service” is consistent with the payments flows, the turnover, etc.
- › The provision of the good is the main part of the service and the quality of the good rented should be included in the overall bundle (but only for the portion related to the good, says Aurél Kenessey).





2. The SNA 2008, “rental and operating leasing are a gross service”

- › Financial leasing is considered as a “net service”, but is in fact reclassified in banking activity (FISIM)
 - There is no link to the good leased or its quality.
- › Par. 6.245: “It is possible to draw a comparison between consumption of fixed capital and rental of assets under an operating lease. The rental is the amount payable by the user of a fixed asset to its owner, under an operating lease or similar contract, for the right to use that asset in production for a specified period of time. The rental needs to be large enough to cover (i) any direct costs incurred by the owner including the costs of maintaining the asset, (ii) the reduction in the value of the asset over that period (the consumption of fixed capital) and (iii) the interest costs on the value of the asset at the start of the period. [...] When the asset is actually rented under an operating lease or similar contract, the rental is recorded under intermediate consumption as the purchase of a service produced by the lessor. [...]”



2. Eurostat Handbook on Price and Volume Measures in National Accounts (2001)

- › A, B and C methods (Renting services, page 101)
- › An A method for these services would be to collect actual rental prices. For services supplied according to a contract it is necessary to control for changes in quality over time. Furthermore, since the services can be unique, from client to client, close contact with the different enterprises in the industry is needed. It should be noted that changes in the quality of the item rented (i.e. not only of the rental service) should also be reflected in the volume of the rental services. For unique services, the use of model prices satisfying the criteria specified in section 2.5 would also be an A method. [...]
- › If no observable price of the rental service exists the price index of the actual product can be considered a B method: on the assumption that there is a correlation between changes in the price of the item and changes in the rental price of the item.



3. What should be included in the quality change of rental and leasing?

- › By principle, both the quantity and the quality of the good rented should be included.
- › In other historical discussion between economists and national accountants (Gordon vs. Denison, 1990) and in other paragraphs of the SNA 2008, the quality adjustment of a fixed asset must be “forward-looking”, i.e. directly linked to the productive performance of the fixed asset.
- › For the net (rental) service added to the good rented, Aurél Kenessey thinks that the quality of the good rented should not be taken into account. It is clear in a producer’s costs view.
- › Anyway, some parts of the net (rental) service as opposed to the good itself are highly correlated with the quality of the good (maintenance, insurance, etc.), and in a user view (which should predominate) it is unclear whether these supplementary services should be seen as additive or could be seen more simply as multiplicative relatively to the good provided.



4. Consistency of production functions and “double counting in GDP”

- › Double counting in GDP if the rental service is quality adjusted on the good rented is a possibility.
 - Cars rented to households: the quality change is counted once in the GFCF of the lessor and a second time in the Final Consumption of the lessee (in case of a fixed asset, it is only counted once in GFCF).
 - Double counting in GDP also occurs in dwellings and dwellings services.
- › NDP and NNI are better estimates of economic welfare.
 - There are no double counting there, as the quality change is counted once negatively in CFC.
- › Final Consumption:
 - the consistency between renting and purchasing is guaranteed only if the rental service is quality adjusted with the good.
- › Production functions:
 - For consistency between the two kinds of inputs (GFCF / IC) and between input and output, a quality adjustment of the rental or leasing service on the good rented is required.

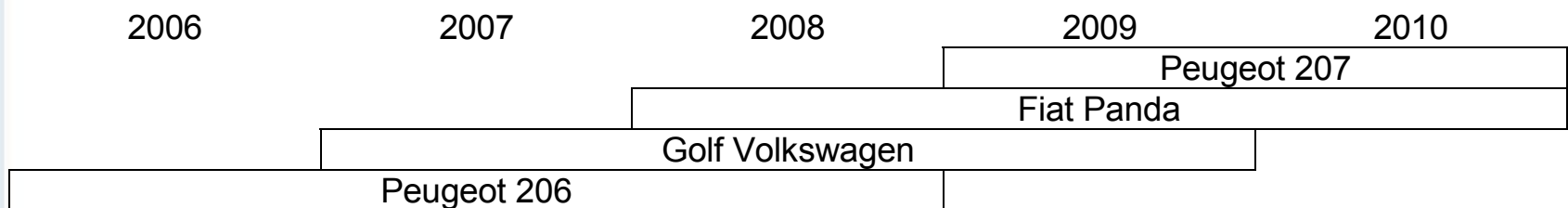


5. Pricing mechanisms and pricing methods in short term rentals

- › A lot of NSOs use directly repeated prices, consistent with the price mechanisms of the industry.
- › The main features are:
 - the good rented: type of good rented (car/truck/machine) / category (especially for cars) / main characteristics (loading capacity, power, specific equipment...) / sometimes reference of a precise brand and model;
 - the “service”: duration of the contract of rental / day of week for short term leasing (working day or week-end) / kilometres for the vehicles (sometimes counted apart) / inclusion of insurance, maintenance (sometimes counted apart), etc.
 - other: type of customer (households, small firms / big firms...) / old or new contracts.
- › These specifications should lead to an implicit quality adjustment on the good rented (first and main feature). But is it ideal according to the NA theory?

5. “Narrowly defined categories” of goods rented

- › In the same category “B” of the pricing mechanisms (and of the elementary items) are Peugeot 206, Golf Volkswagen, Fiat Panda, but also Peugeot 207, successor of Peugeot 206 and of higher quality. Let us suppose that the brands and models rotate every 3 years (the vehicles themselves should rotate every 1,5 or 2 years):



- › In 2009, a quality adjustment should be introduced for Peugeot 207 vs. Peugeot 206, for the right proportion of the turnover due to this brand and these models.
- › Every year, even when the brands and models are kept constant, the equipment can change and so does the quality.
- › This is neglected in both US and FR price data collections, but US says it is conceptual, FR only says it is too complicate.
- › What about the countries that apply explicit quality adjustment?



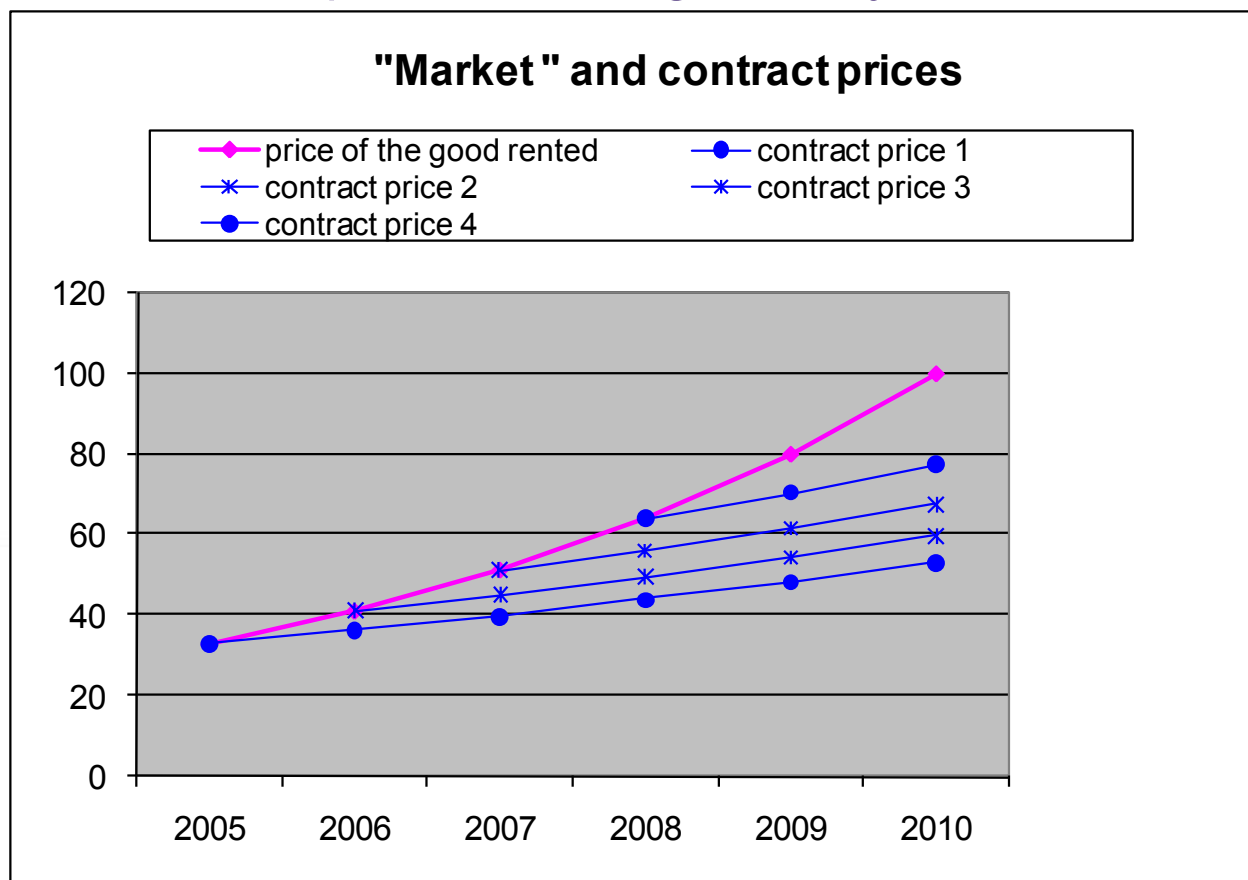
5. Contract prices for long term leasing

- › In long term leasing, especially for other transportation equipment, the client is often unique, and also the fixed asset leased. The boundary with financial leasing is unclear (theoretically the term should differ from the end of the life expectancy but there are also formal or bad reasons not to classify in banking). The monthly rents are constant, then the price indices would be flat.
- › In other renting and leasing industries, the price mechanisms distinguish between old and new contracts (and so do the pricing methods). Normally, the old contracts prices are more flat than the new contracts' ones.
- › These flat prices (or “more flat” prices) are true for these particular transactions, but is it true for the whole economy? The observation of the (old) contract prices often underestimates the market and real price structural change: classical bias observed on rental of dwellings.



5. Contract prices for long term leasing

- › The underlying “market price” should be linked to the price of the good rented (and to the interest rate), and it is a reason why this industrial PPI could be preferred to a “contract price” S-PPI that misses the new contracts, even if the output “is not the good only”.





6. Use of S-PPI by national accounts

- › Some countries already use SPPI as deflators for national accounts: Czech Republic, France, Japan, Norway, United Kingdom, United States
- › Some countries do not yet use S-PPI as deflators of NA, but will do so soon. In Canada, the Machinery and Equipment Rental and Leasing Index was recently published. SNA methodologies are being adapted to incorporate the new data sources. The old current SNA method uses industrial PPI or CPI of the good rented.
- › The Dutch national accounts team does uses only “new contracts” renting and leasing S-PPI as deflators. Must be linked to the bias quoted previous slide.
- › The US national accounts use the BLS SPPI to deflate industry gross output even though the output concept used in the SPPI is not perfectly aligned with the recommended SNA 2008 concept.



7. But there is a life outside the concepts of national accounts!

- › National accounts are not the only users of S-PPI series. The sector professionals and their customers are also very much interested by these price series, for contract escalation or for the short term analysis of the sector.
- › In his paper of 2005, Michael Holdway quotes Jack Triplett, 1998: “<statistical measurement> that is not accepted by, or is not understood by, broad user groups does not meet all the requirements for a public economic measurement.” In our view, it would advocate less for a “net approach” (very complicate indeed) than for a pricing method very close to the pricing mechanism of the industry.
- › Hence, a dissemination of two sets of series as proposed by Canada (adjusted and unadjusted on the quality of the good rented) makes sense: the first one for national accounts and the second one for the professionals.