## 12th Séminaire ACN, June 2008, Session 5 (Friday June 6 morning)

## Session 5 : Macro-economic Modeling and National Accounts

## Estimating value added and employment generated by a particular industry within national accounts' framework : the case of health care in France

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Health care issues are often approached in France through considerations concerning public expenditure, lack of funding or final consumption. From this point of view, health care is only considered as a cost. However, production from hospitals, from physicians, and more generally speaking from all health care services create much economic growth *per se*, and support the activities of numerous industries, in particular high value added industries (pharmaceutical industries, cutting-edge medical equipments engineering medical research and development) but others also (insurance activities, construction). This paper is an attempt for measuring the value added directly or indirectly generated by health care activities. It will also try to estimate as well the level of taxes generated by these activities.

Data used are those of French national accounts, set into a classic input-output model describing an open economy. The use of the intermediate consumption matrix allows to determine what products are intermediately consumed by health sector. In order to satisfy this intermediate consumption demand, upstream sectors are stimulated as well, which is creating additional value added and employment. Finally, this value added is redistributed to employees, allowing for households consumption's increase, and to enterprises and public administrations, allowing for investment's increase.

Strictly considering health care services, their weight in French GDP is estimated to 5.5 % for year 2005. Including indirect effects, effects transiting through the intermediate consumption matrix), this weight goes up to 8.5 % of GDP. Taking into account the induced effects on final demand leads also to raise this figure further. In the end, figures traditionally put forward by the most optimistic studies concerning the place of health within the French economy may even be underestimated, in so far as the whole interactions between industries are considered.