without explicit policy intervention to stabilize the economy when the service share increases.<sup>29</sup>

In Canada, the EEC study considered whether services were more or less sensitive to cyclical shocks than the manufacturing sector. The study examined changes in employment during and after three recession periods. It found that there was a considerable difference between the goods and service sectors, and indeed within the service sector itself. Employment in services deceased only in the first recession period 1981-1982 while, in the other two periods 1974-1975 and 1979-1980, employment in services increased. Statistics Canada (1993) complemented the ECC study by examining the cyclical sensitivity of services during the 1991 recession. It found that non-market services payrolls are less sensitive to cyclical shocks that commercial services payrolls which tend to behave like goods producing industries. The overall services employment was thus less affected by economic fluctuations than the manufacturing sector. It

## **1.2.2 Output**

## -Measurement problems

Before addressing output per se, it is useful to take note of the measurement problem. Accurate measurement of services has been a burden for those attempting to assess output and productivity. The methodology used for collecting data as well as the broader problem of "we do not know exactly what is being transacted, what is the output and what services correspond to the payments made to their providers" are mainly responsible for the measurement problems.

## -Various output issues<sup>33</sup>

Measurement problems, however, have not prevented researchers from studying service output. Some like Kravis, Heston and Summers (1982) have examined the correlation between final-expenditure services prices and income levels. <sup>34</sup> Their main findings were that the price of services generally rises with per capita GDP, instead of the quantity of services purchased. More generally, Katouzian (1970) and Greenfield (1966) found that the demand for services was expected to rise with an increase in economic

<sup>&</sup>lt;sup>29</sup> Lee, J. (1996)

<sup>&</sup>lt;sup>30</sup> A similar experience was found in regard to output, the service sector output declining only in the 1982 recession.

<sup>31</sup> Statistics Canada, Labour perspective (1993)

<sup>32</sup> Griliches (1992), p.7

<sup>&</sup>lt;sup>33</sup> Over the years, we have thus made progress in analytical research from a global understanding of the functioning of the services pricing system, measurement and definition to the impact of services on the structure of production. A growing literature has also begun to emerge on the performance or the growing share of specific service sectors such as financial services, but it will not be covered here.<sup>33</sup>

<sup>34</sup> Balassa (1964), Samuelson (1964), Bhagwati (1984, 1985) and Panagariya (1988)