quality of communication would undercut the "raison d'être" of integrated firms". <sup>40</sup> He also asserted that "the expansion of the service economy is due in part to the fact that goods-producing industries firms have begun to switch from internally to externally supplied services. The growth of the service economy is a sign of growing efficiency." -Services and changes to the structure of production

There has also been a growing interest in understanding the phenomenon of a rising share of services inputs into manufacturing. It is apparent that for goods producing industries to become more competitive, they must increase their value-added. In the past, this has been done by using more services as inputs, which in turn increases the demand for these service inputs. François and Reinert (1996) conducted a study on the role of services in the structure of production and trade for 15 OECD countries. They noted that the expansion of services is related to both increased production of intermediate services by the private sector, and increased demand in manufacturing for services inputs. They concluded that the growth in demand for services was more closely related to changes in the structure of production rather than to contracting out or to the splintering process.<sup>41</sup>

In Canada, the ECC study came to similar conclusion highlighting the importance of fundamental changes in the structure of production. "...the goods industries are the source of a substantial part of the demand for the output of the service industries and likewise, the service industries are the source of a substantial part of the inputs required by goods producers." In particular, the manufacturing sector, which has more industrial linkages than the service sector, has a greater stimulative power on output of services than that of services production on goods; a significant part of the service-sector growth derives from growth in the level of activity of resources and manufacturing in Canada. According to the ECC, there has a been an increase in services used as intermediates in manufacturing, but this aspect along with contracting out and change in final demand partly explain the overall growth in services.

The issue, raised above, about the destination of services, either for final demand or as inputs, is an important one for understanding the significance of the service sector. Final demand expenditures for services account for a small share of total service output, the remaining being accounted by intermediate inputs.<sup>43</sup> For more traditional services, such as the public sector, however, the share of final expenditure will be higher than for commercial services, which sell more services as inputs to manufacturing industries. According to the ECC, commercial service sectors sell over 50% of their service output as intermediates.

<sup>&</sup>lt;sup>40</sup> McKenzie in Grubel (1987), p. 89

<sup>&</sup>lt;sup>41</sup> François and Reinert (1996)

<sup>&</sup>lt;sup>42</sup> ECC report (1991), p.53

<sup>&</sup>lt;sup>43</sup> However, we will see in Section 2 that demand for final consumption still has a role to play as determinants of growth in some countries.