

# **VOORBURG GROUP ON SERVICES STATISTICS**

**Eleventh Meeting**

**Session 4**

## **LABOUR PRODUCTIVITY INDICES FOR SELECTED SERVICE ACTIVITIES IN TEN OECD MEMBER COUNTRIES**

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## Labour Productivity Indices for Selected Service Activities in Ten OECD Member Countries

1. This document contains a series of graphs showing labour productivity indices for ten OECD countries, namely Australia, Austria, Canada, Denmark, Finland, France, former West Germany, Japan, the Netherlands and the United States. Productivity indices have been calculated for total GDP, total services and ISIC Rev.2 major divisions 6 to 9. Item "Producers of Government Services" is shown separately, in conformity with the requirements of the revised 1984 UN-OECD National Accounts questionnaire. Productivity indices have also been calculated for sub-items of "Finance, insurance, real estate and business services" for those countries where a breakdown was provided.

2. These results have been derived from the OECD publication "Services: Statistics on Value Added and Employment" [1] containing Member countries' national accounts data at the most detailed level available. The wording of item headings in the legend have been corrected to take account of major differences between national classifications and the ISIC.

3. The productivity indices have been calculated as follows:

- value added at constant prices, expressed in national currency, has been divided by measures of total employment.
- the resulting measures of value added in constant prices by unit of labour have been converted into index series taking 1980 as base year (except for the Netherlands for which the base year is 1982).

4. The period covered is 1970-1995, as far as data were available. Value added may be expressed at market prices or at factor cost. Total employment may be expressed in numbers of persons employed, numbers of jobs held, full-time equivalents of persons employed or jobs held or in man-years.

5. An adjustment has been made to series when a break appears due to changes in the constant price base year or in definitions. The earlier series have been multiplied by a coefficient obtained by dividing the estimate for the first year of the present on-going series by the estimate for the same year in the former series.

6. These graphs show that in the "market" services sector labour productivity, thus defined:

- has grown faster in the whole economy than in the services sector in all ten countries, though the difference is slight in West Germany.

- Productivity gains in wholesale and retail trade, restaurants and hotels have been particularly high in Japan, the United States and Denmark. They have been close to average (i.e. close to productivity gains in the services sector) in France, Canada, Austria, Finland and the Netherlands. They have progressed slower than average in West Germany, and have declined in Australia.
- Transport, storage and communication is the area in which productivity gains have been the greatest in all ten countries.
- Productivity in Finance, insurance, real estate and business services has increased substantially in Japan, the Netherlands and West Germany; it has also increased in Austria and in Finland, but at a slower pace. It has remained unchanged in France, Canada and Denmark though with fluctuations over the period. Productivity in this sector has decreased in the United States and Australia.
- Community, social and personal services have experienced a loss of productivity in the United States and Canada. Productivity has remained practically unchanged in Denmark and Australia and has increased in Japan, France, Austria, West Germany, the Netherlands and particularly quickly in Finland.

7. This quick glance at labour productivity in the services sector shows contrasted changes between countries and groups of service activities. Labour productivity in different service activities within a major ISIC division has also progressed quite differently.

8; An illustration is given for financial institutions, insurance and business services.

- Productivity in financial institutions has increased in the United States, Finland and the Netherlands. It has on the contrary decreased in Canada and Denmark, though with fluctuations. In France, a sharp rise has been followed by a decline.
- Productivity in insurance has followed quite a different path. In the United States it has declined. In Finland, the Netherlands, Canada and West Germany it has, on the contrary, increased rapidly. It has fallen in France and Denmark.
- Productivity in business services has fallen in the United States. Gains in Canada, Finland, Denmark and France are close to zero. On the contrary, Canada has experienced a growth in productivity in this field.

9. These rough results, indicative of trends, are to be interpreted with caution. A finer analysis would need to take account of the impact of differences in classifications, in particular of market and non-market services, in definitions, particularly of employment, and in valuation methods. The methods used to derive constant price estimates of value added, described

in [2], diverge considerably from country to country and from one activity to another, and the quality of the resulting statistics is unequal. A more comprehensive view of productivity in the services sector would also require taking into account the contribution of fixed capital.

10. All comments and remarks on this paper and, more generally, on productivity indicators are welcome.

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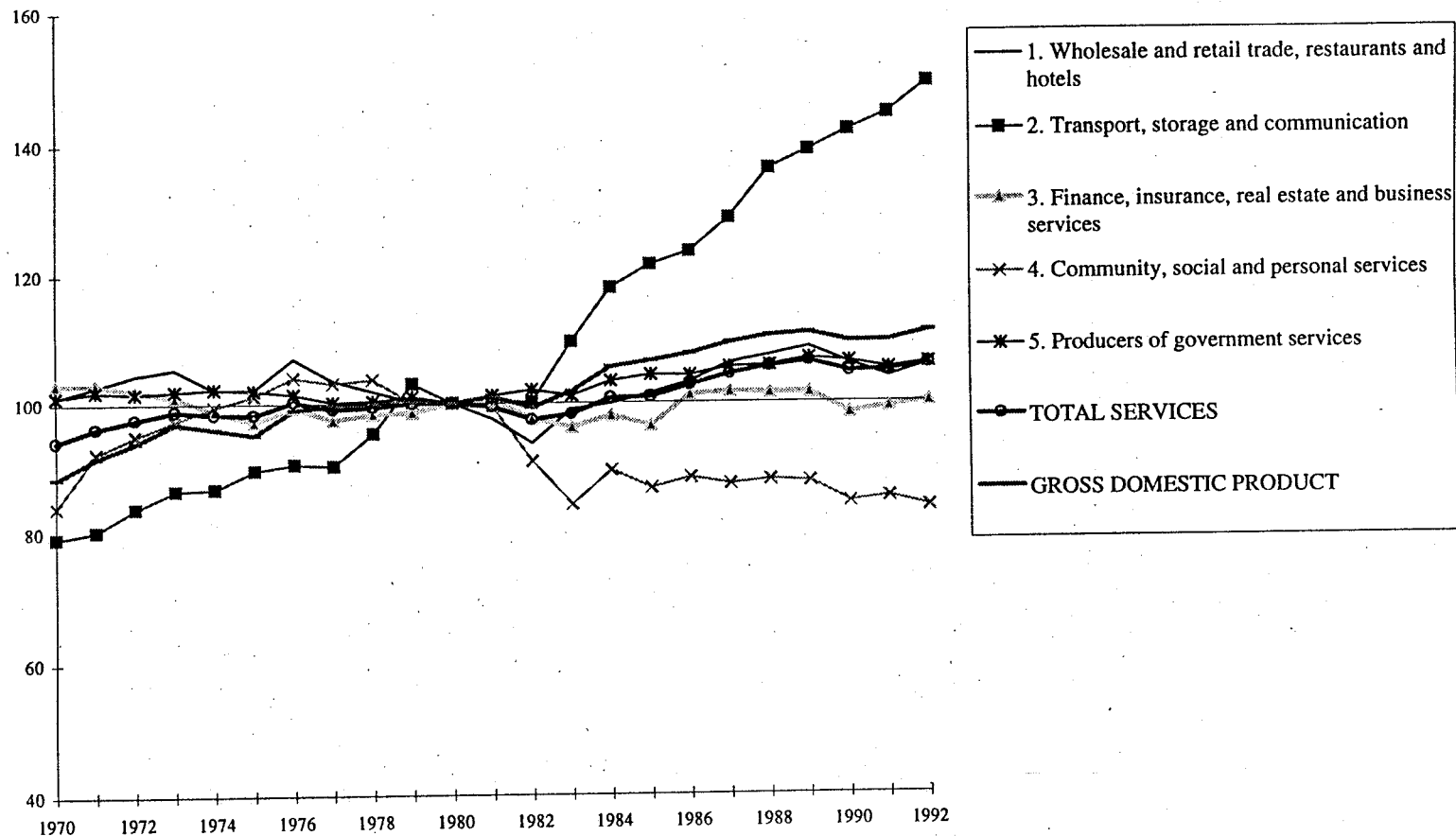
**Notes:**

[1] OECD, Services: *Statistics on Value Added and Employment*, Paris 1996

[2] OECD, Services: *Measuring Real Annual Value Added*, Paris 1996

# Labour productivity indices, 1980 = 100

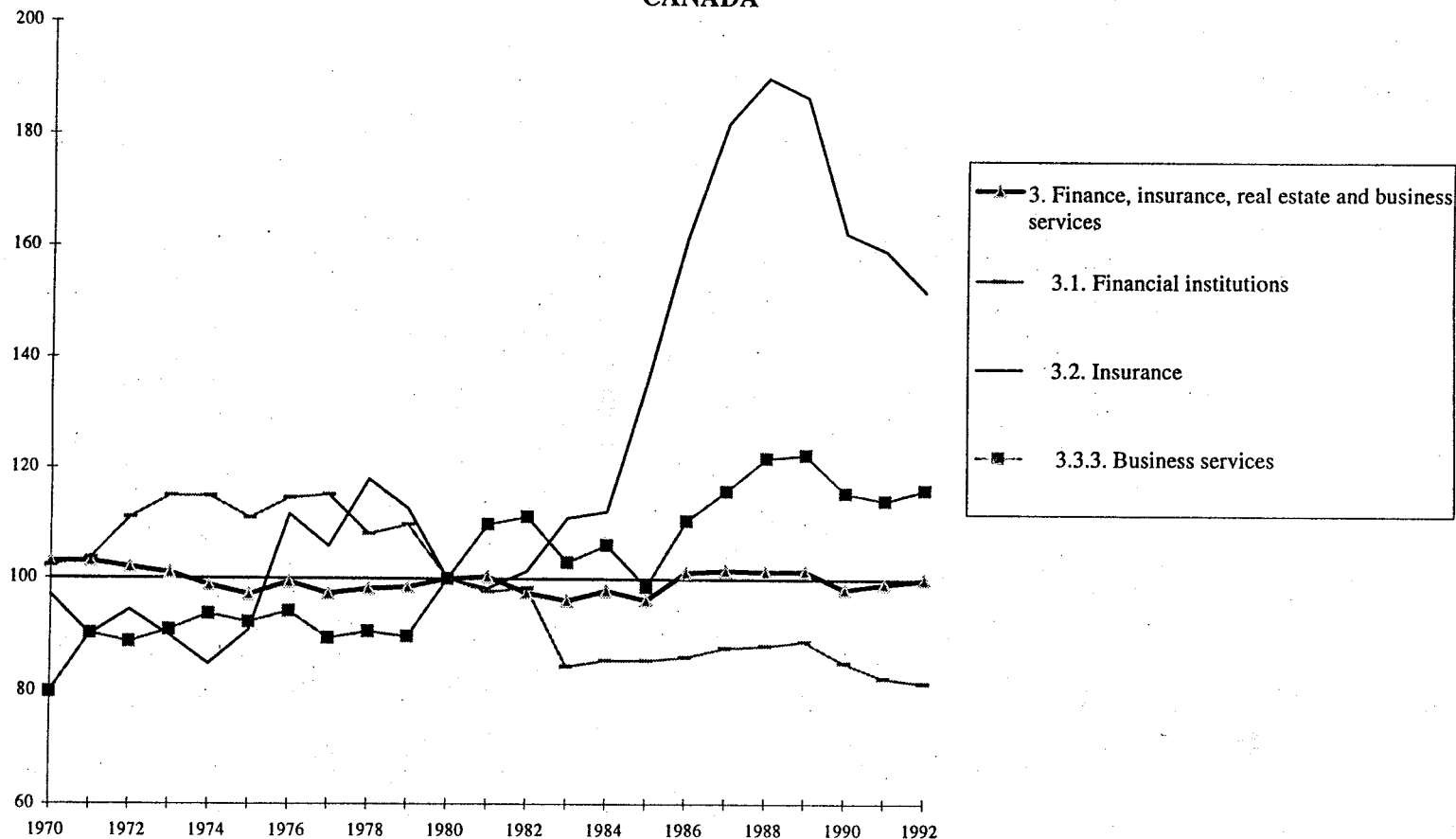
## CANADA



Source : OECD (Services : Statistics on value added and employment)

# Labour productivity indices, 1980 = 100

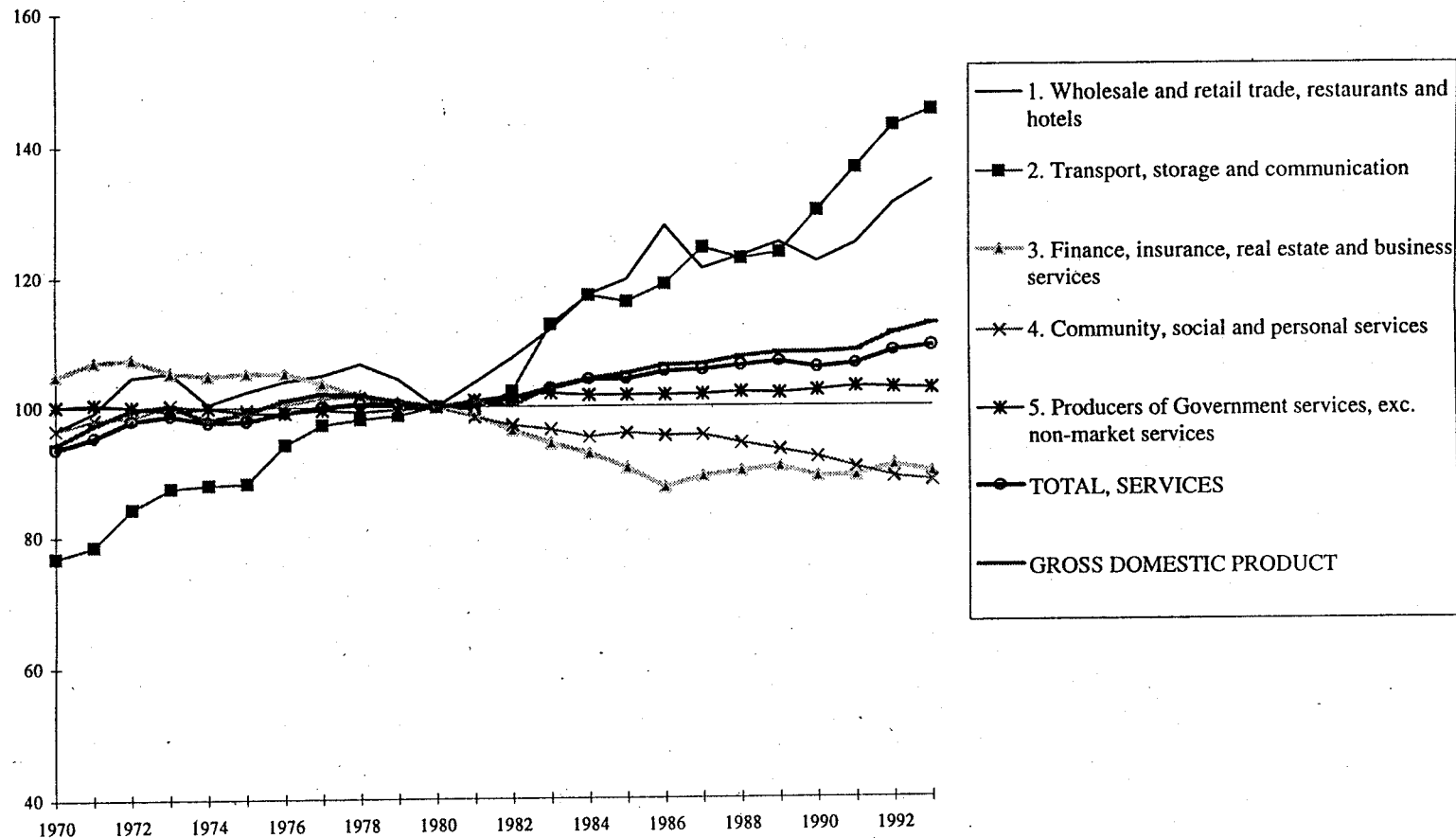
## CANADA



Source : OECD (Services : Statistics on value added and employment)

# Labour productivity indices, 1980 = 100

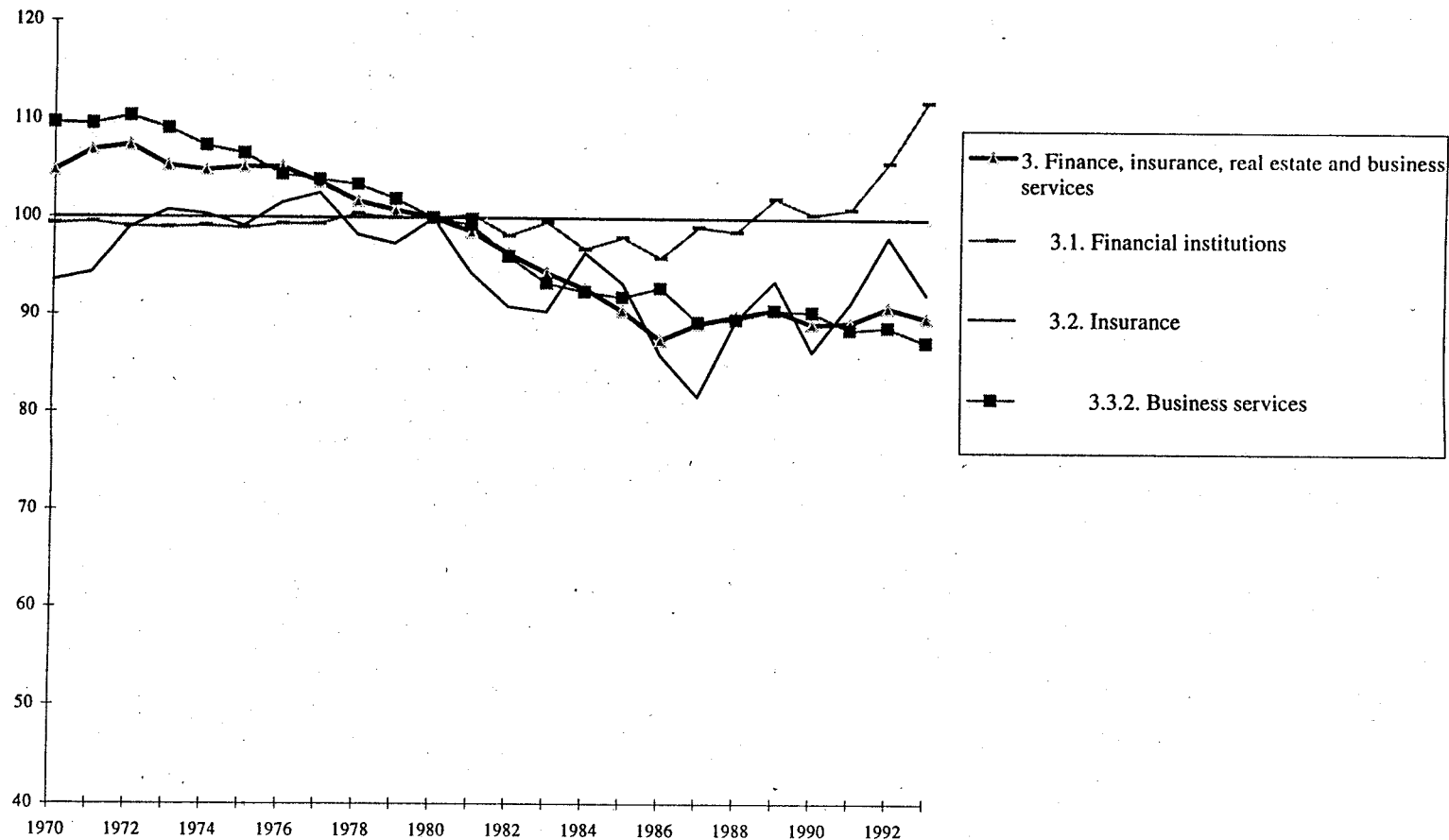
## USA



Source : OECD (Services : Statistics on value added and employment)

# Labour productivity indices, 1980 = 100

USA

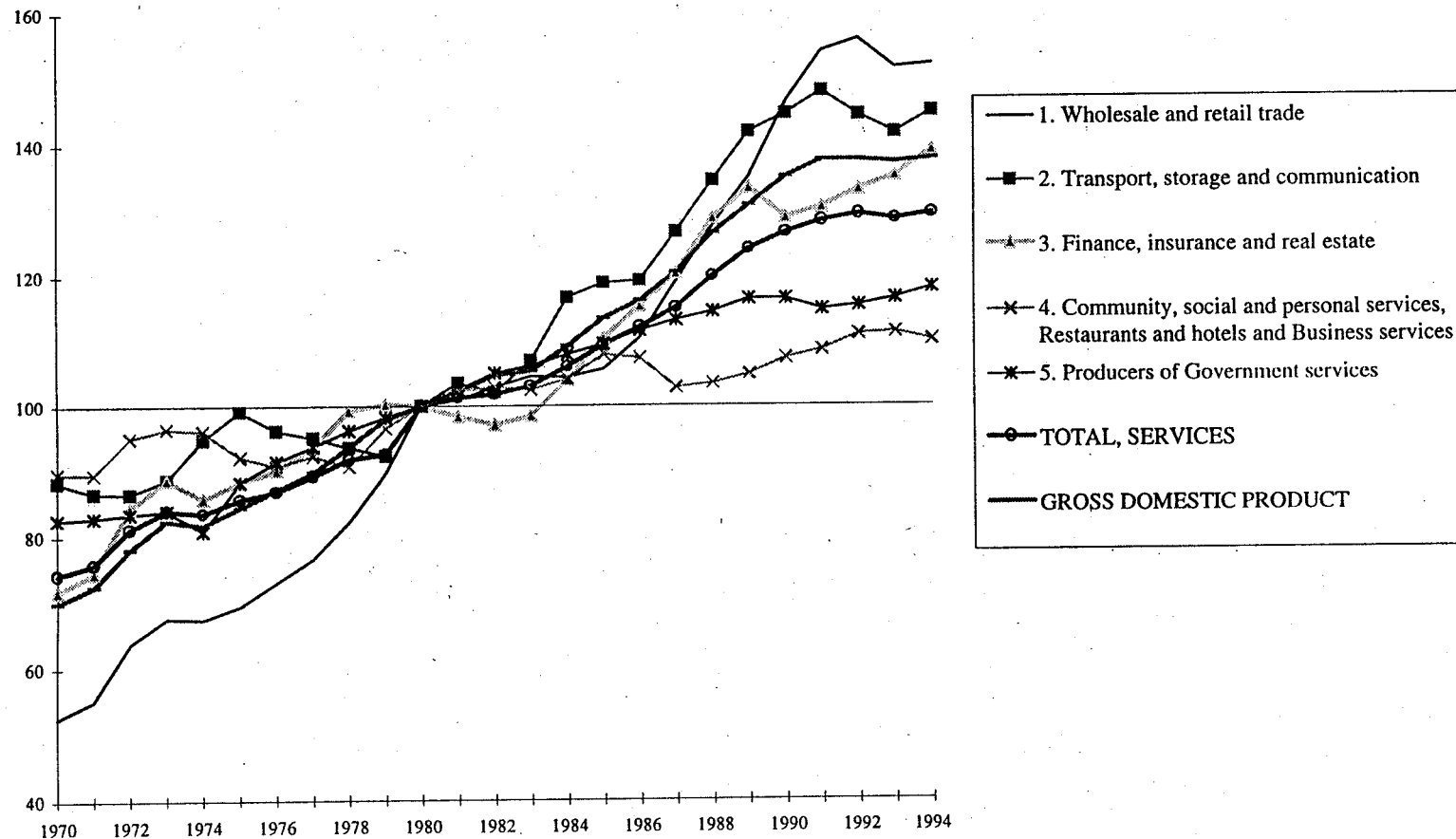


Source : OECD (Services : Statistics on value added and employment)



# Labour productivity indices, 1980 = 100

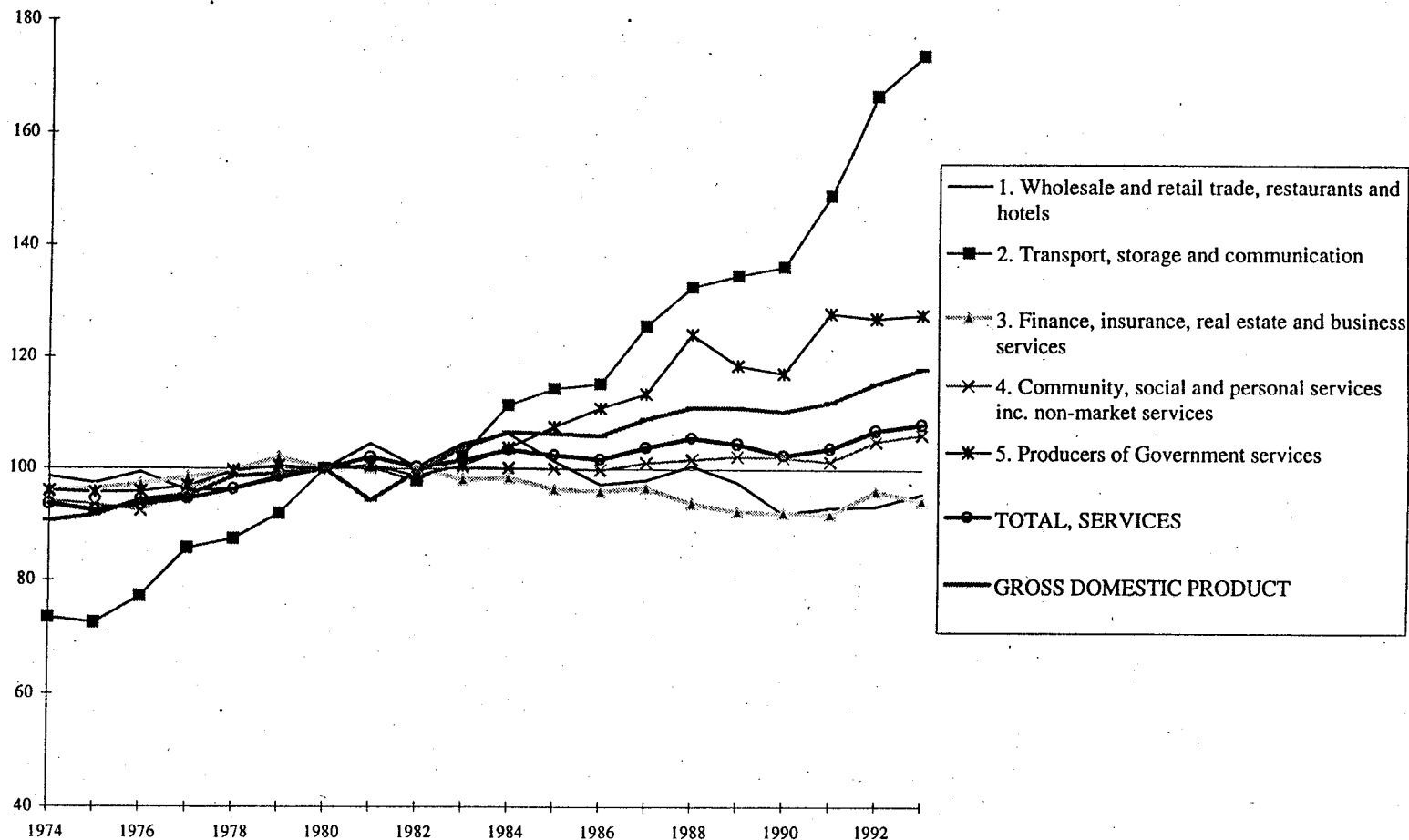
## JAPON



Source : OECD (Services : Statistics on value added and employment)

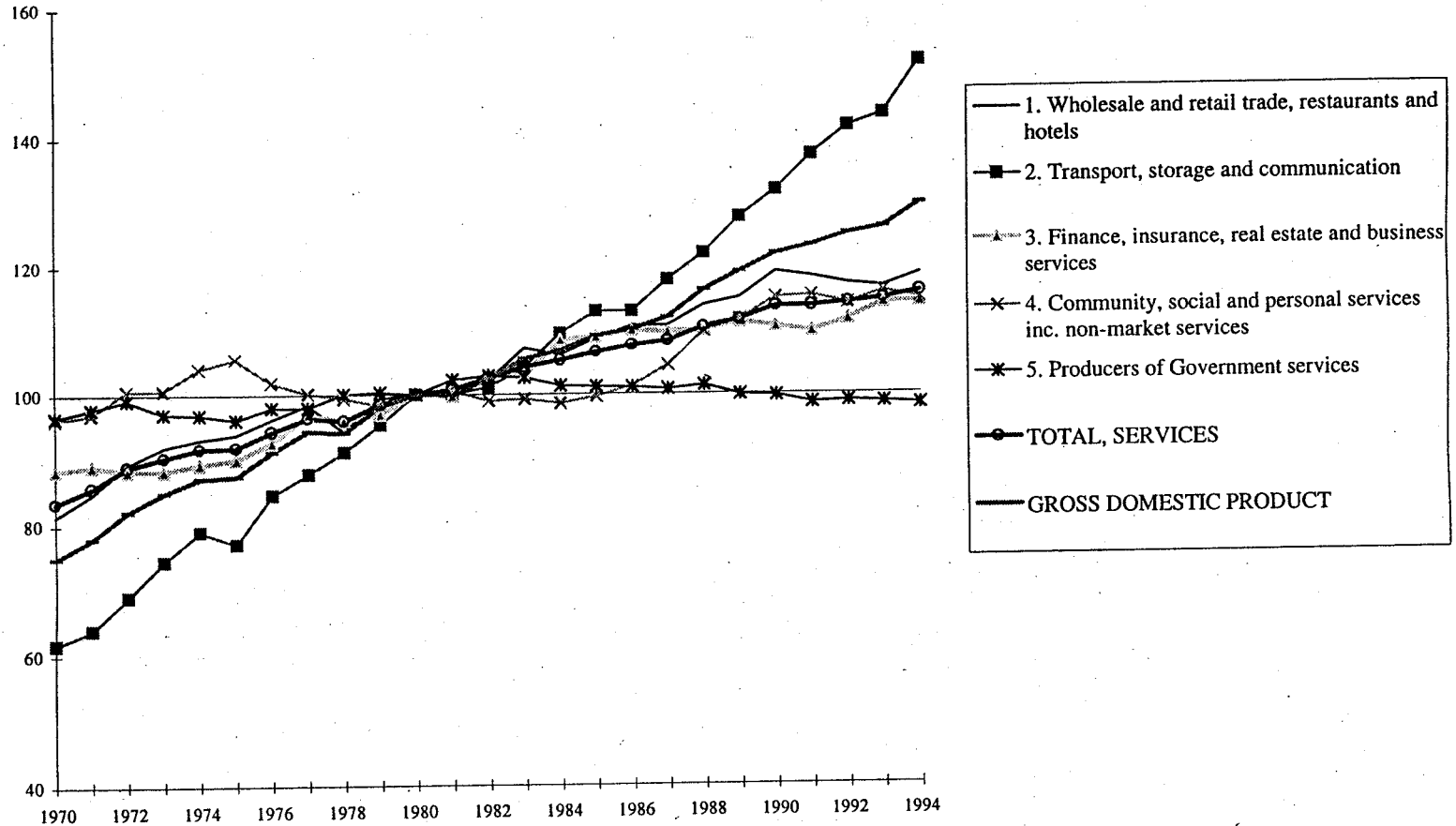
# Labour productivity indices, 1980 = 100

## AUSTRALIA



# Labour productivity indices, 1980 = 100

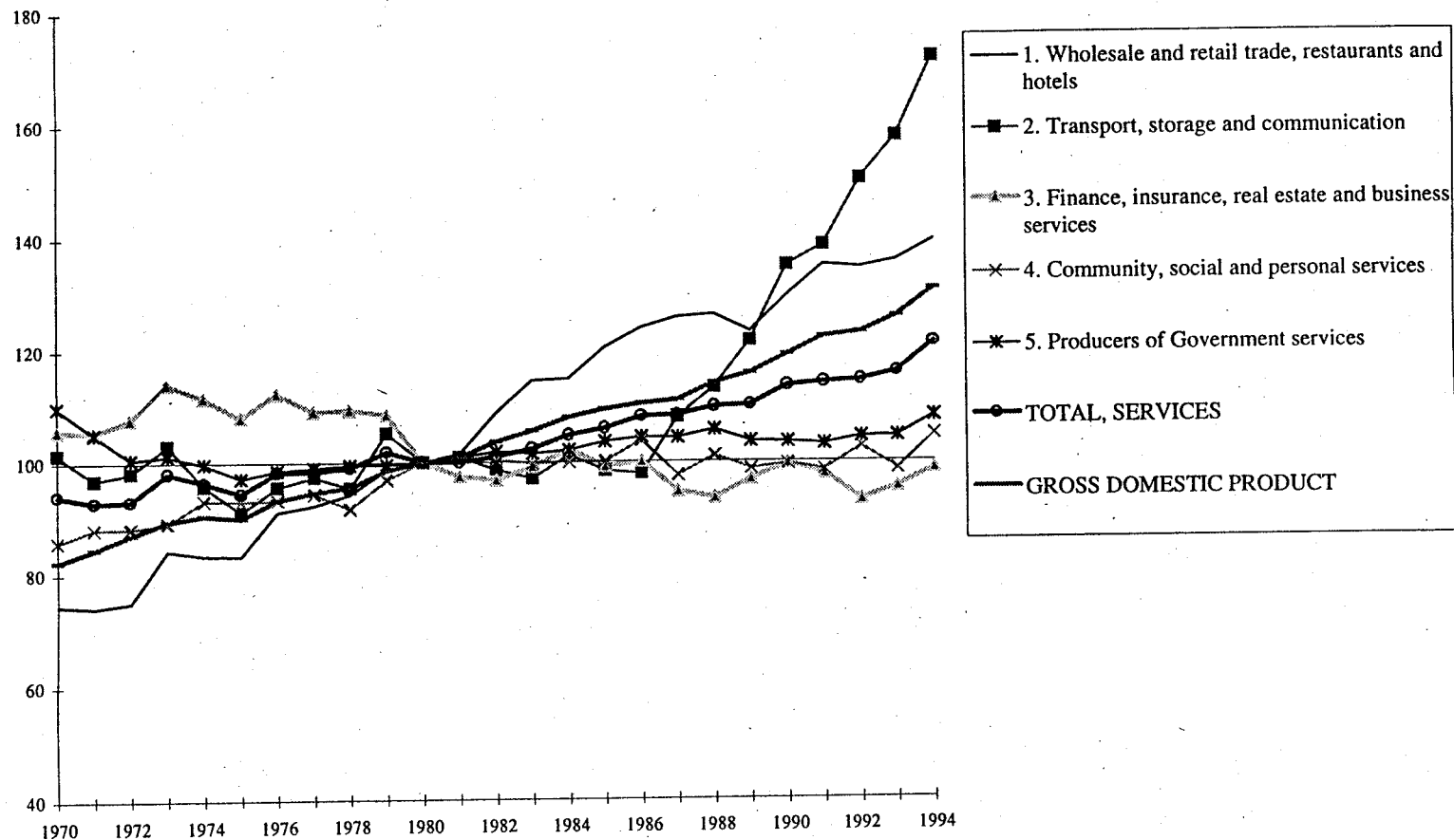
## AUSTRIA



Source : OECD (Services : Statistics on value added and employment)

# Labour productivity indices, 1980 = 100

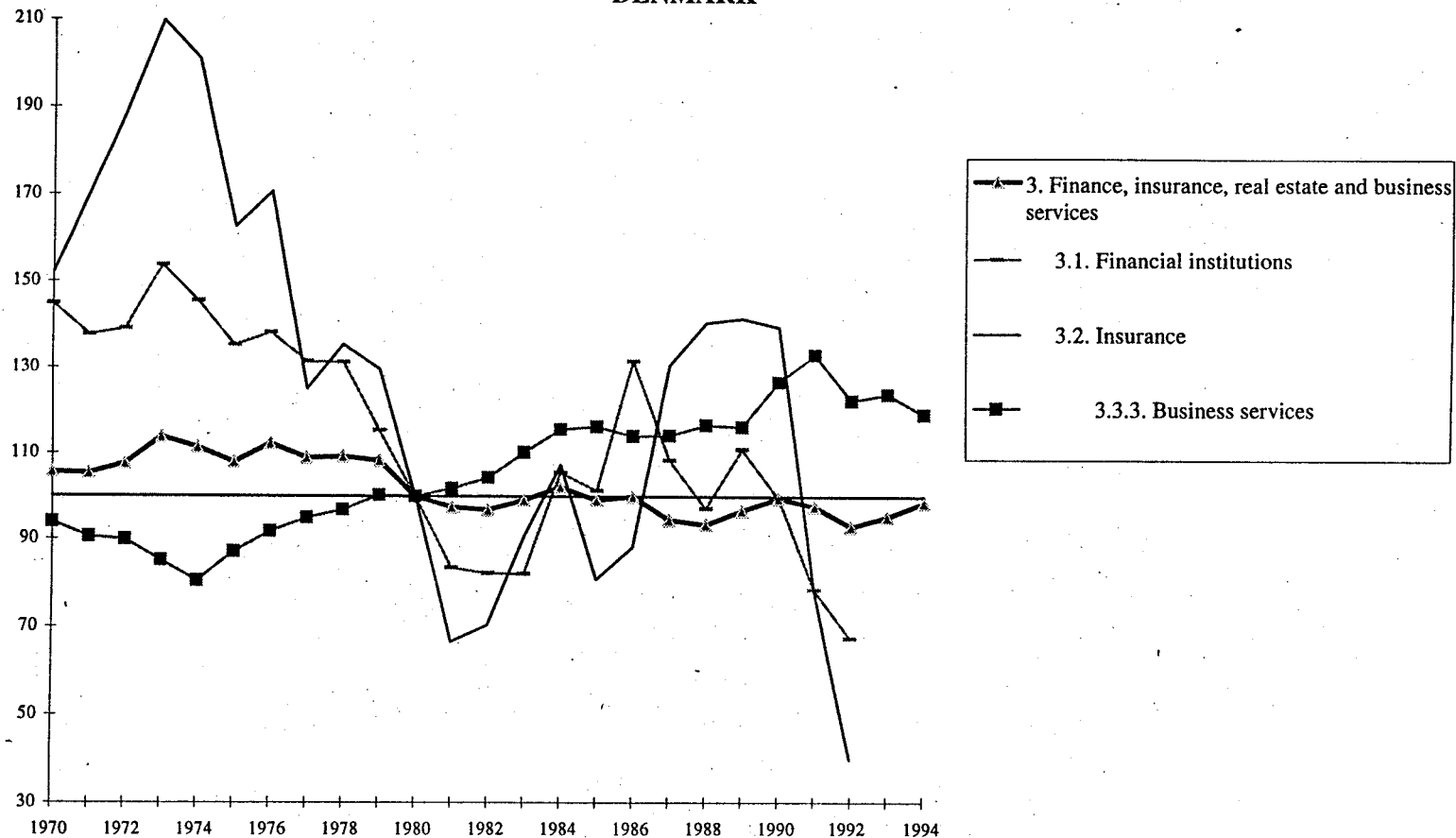
## DENMARK



Source : OECD (Services : Statistics on value added and employment)

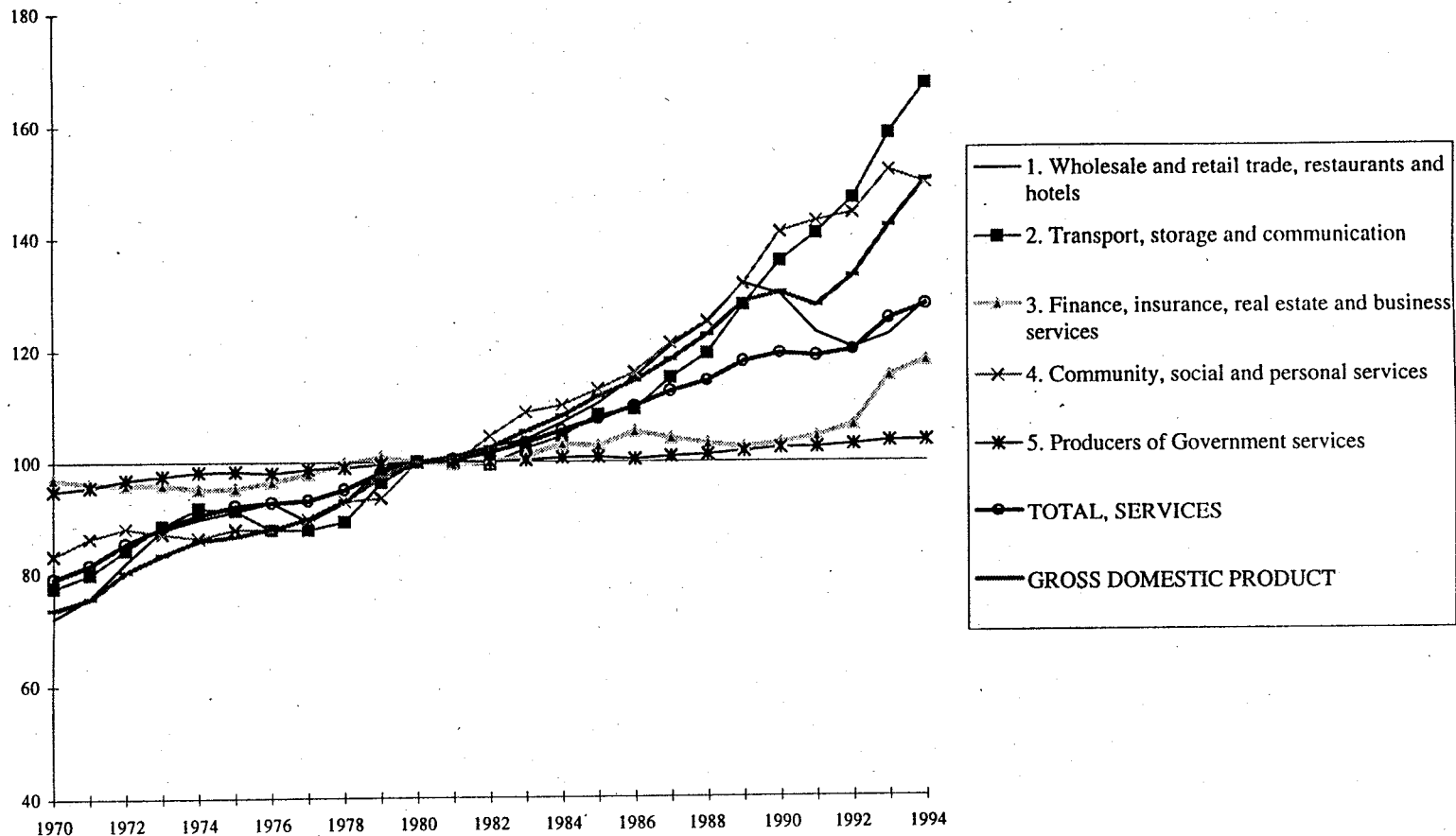
# Labour productivity indices, 1980 = 100

## DENMARK



# Labour productivity indices, 1980 = 100

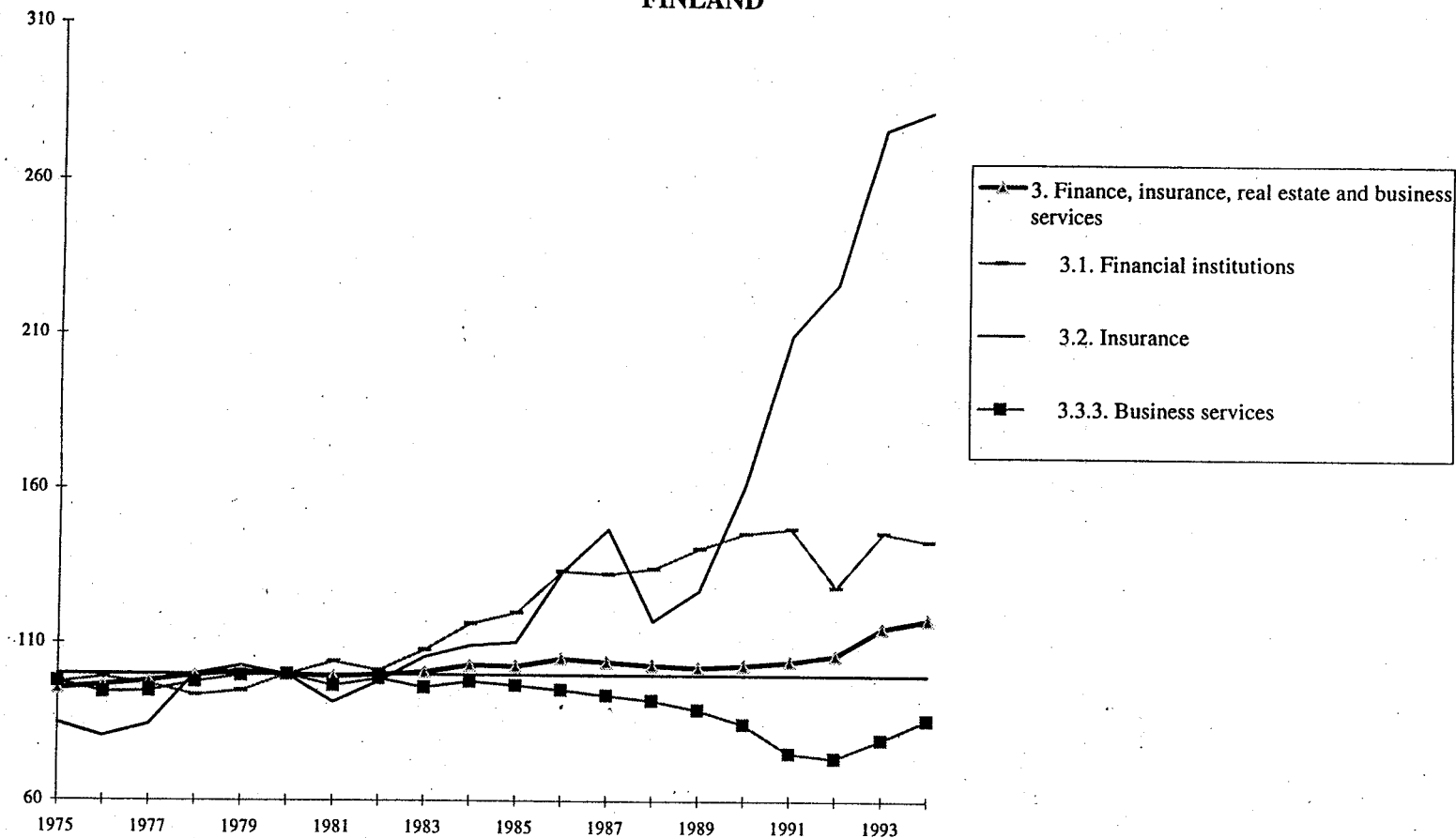
## FINLAND



Source : OECD (Services : Statistics on value added and employment)

# Labour productivity indices, 1980 = 100

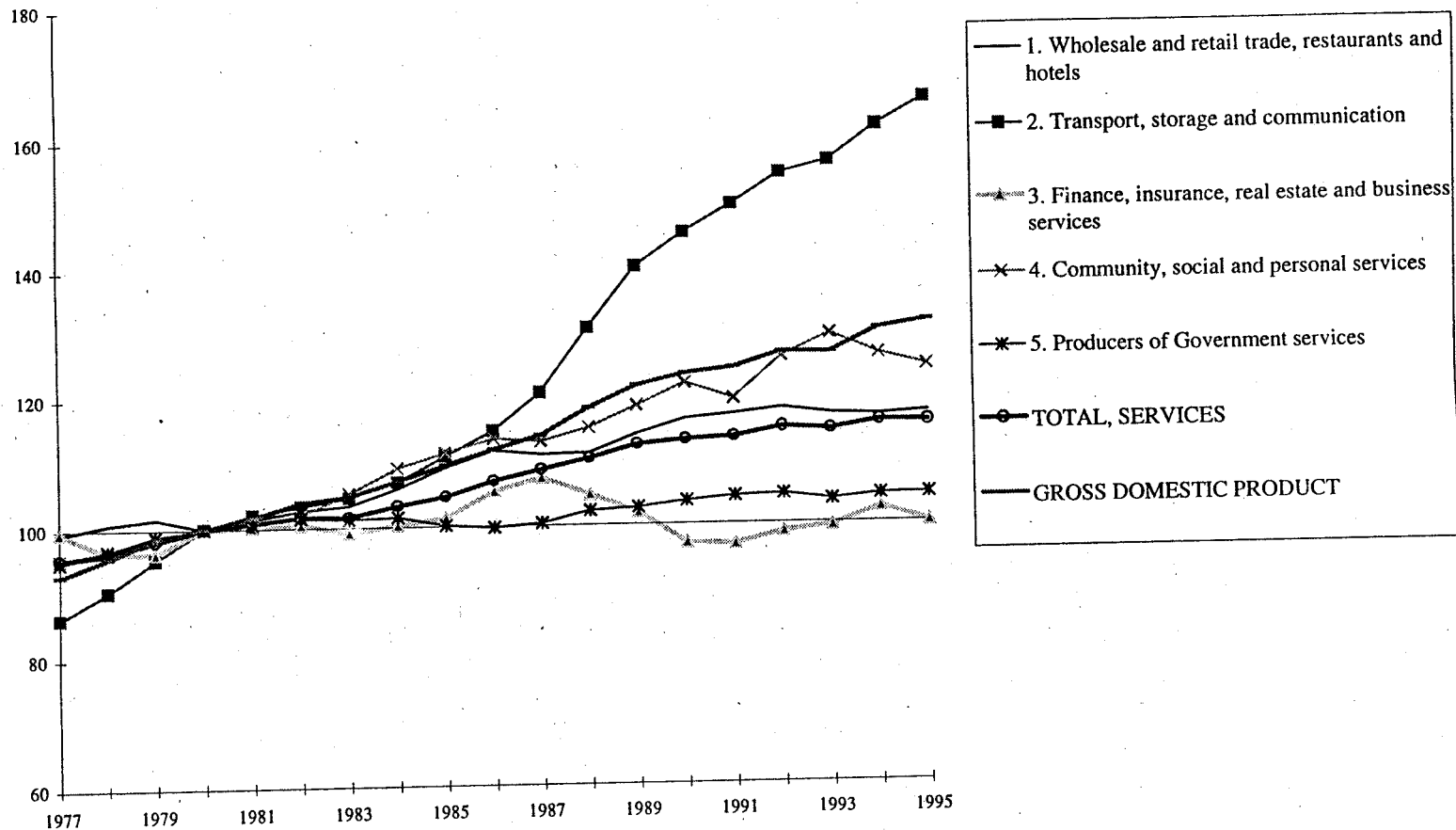
## FINLAND



Source : OECD (Services : Statistics on value added and employment)

# Labour productivity indices, 1980 = 100

## FRANCE

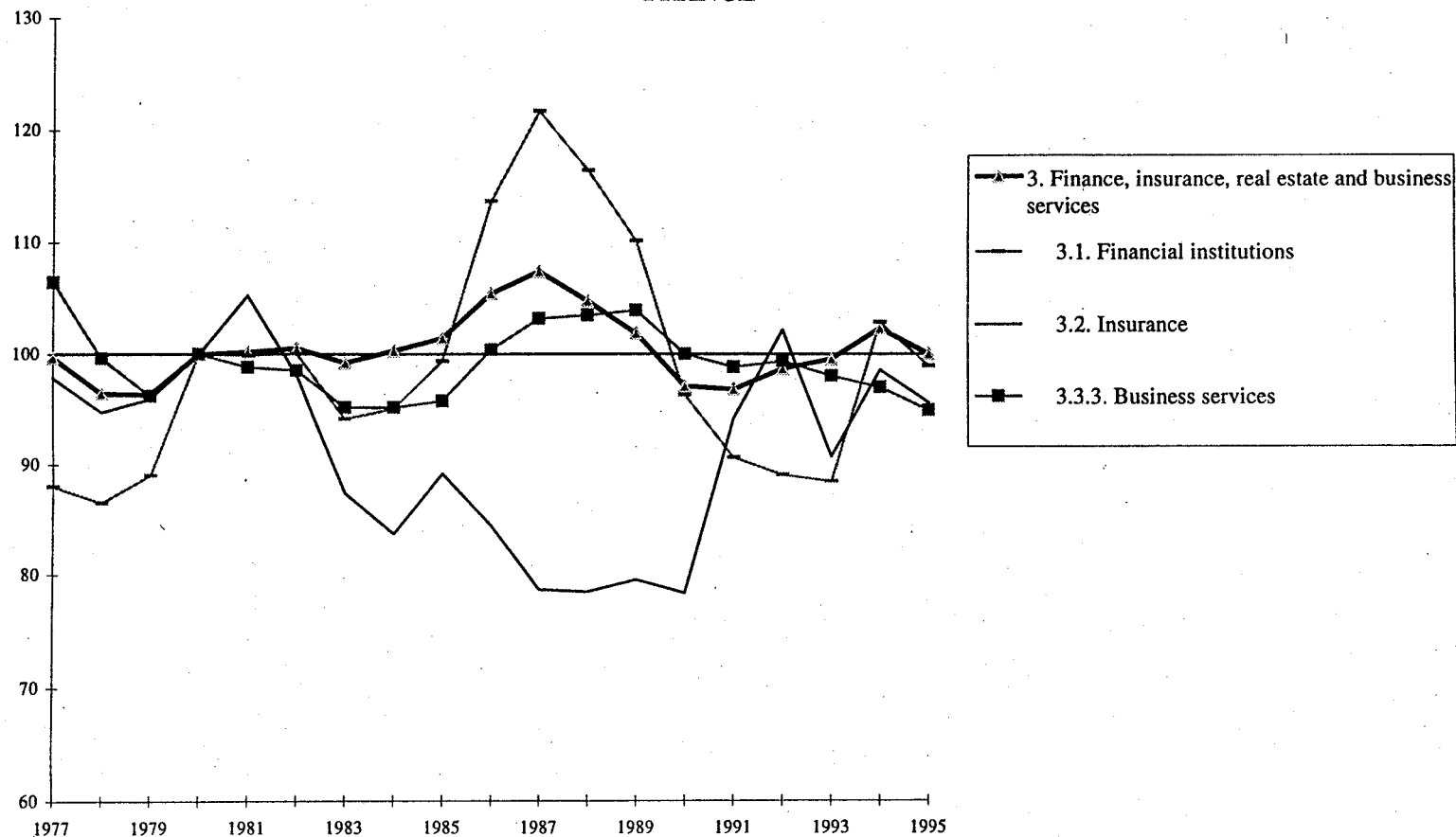


Source : OECD (Services : Statistics on value added and employment)



# Labour productivity indices, 1980 = 100

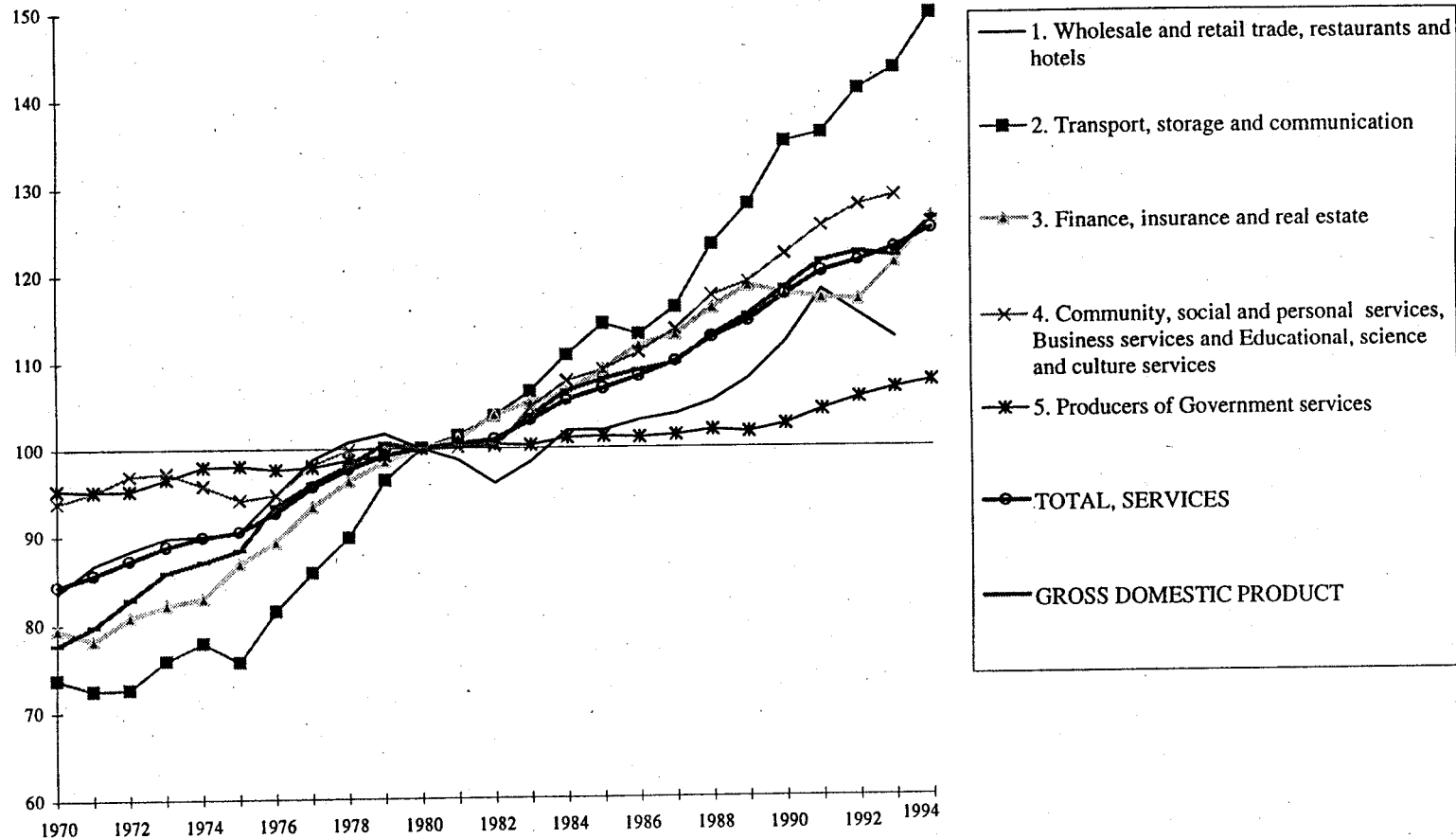
## FRANCE



Source : OECD (Services : Statistics on value added and employment)

# Labour productivity indices, 1980 = 100

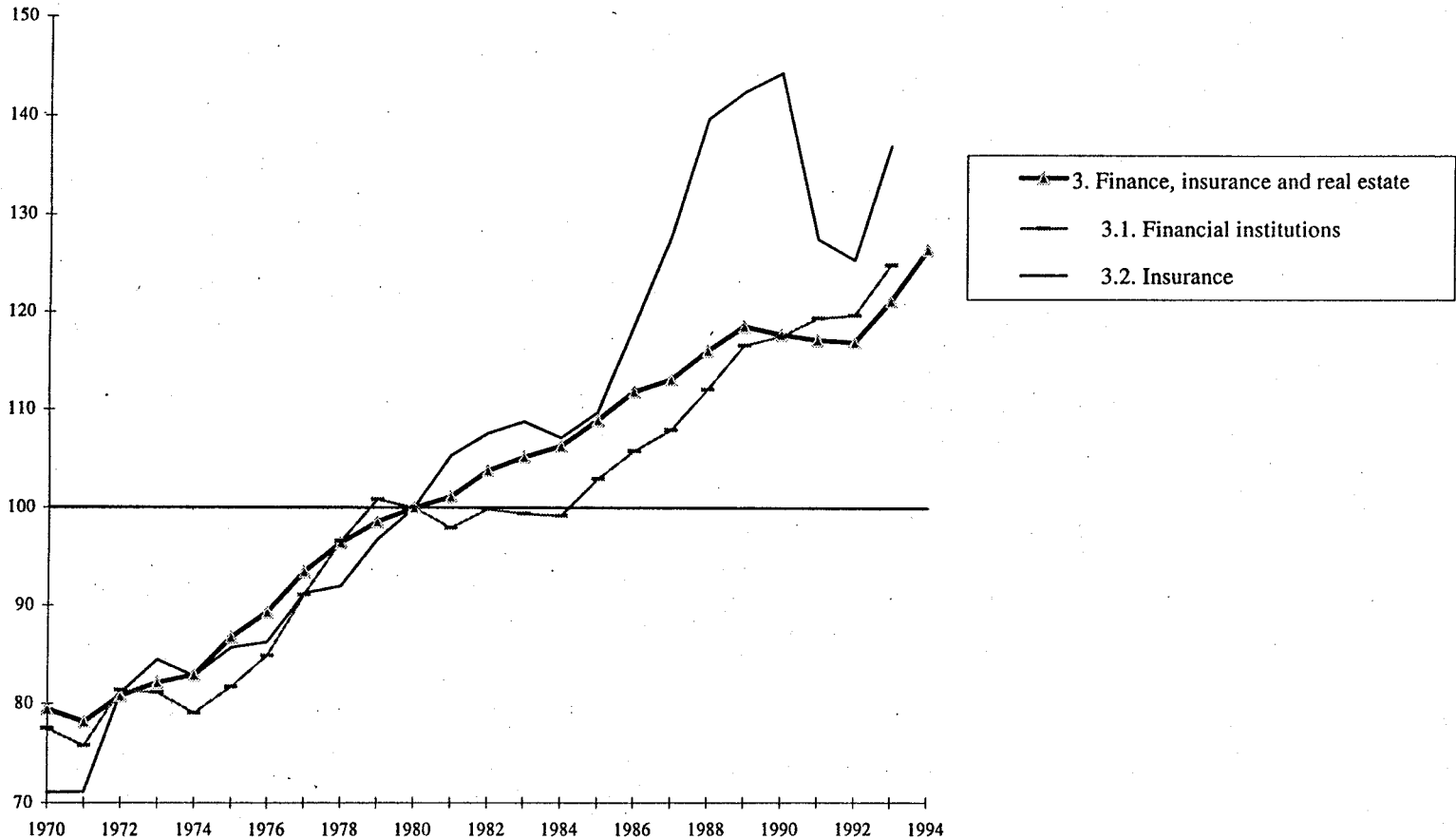
## WEST GERMANY



Source : OECD (Services : Statistics on value added and employment)

# Labour productivity indices, 1980 = 100

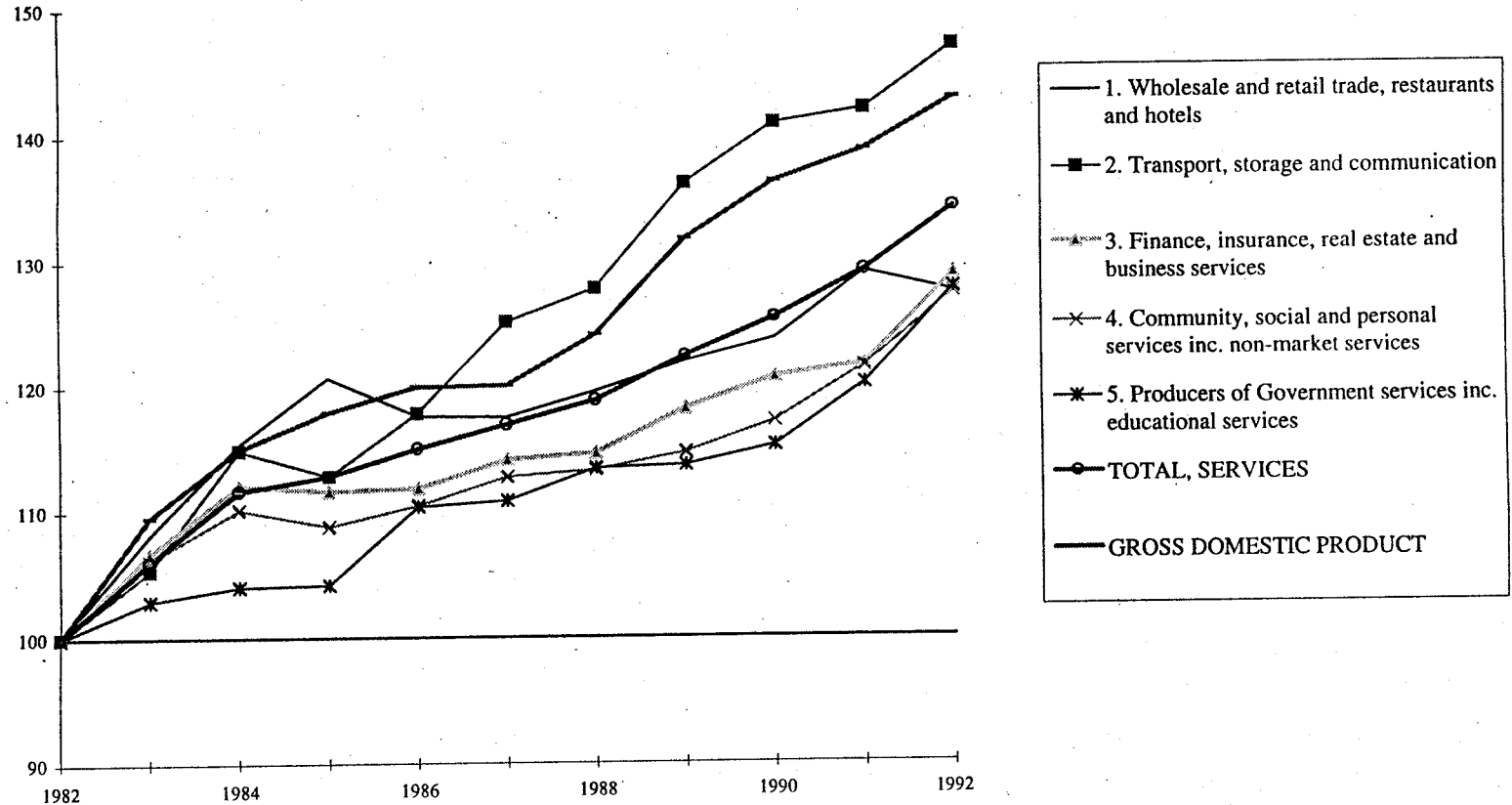
## WEST GERMANY



Source : OECD (Services : Statistics on value added and employment)

# Labour productivity indices, 1982 = 100

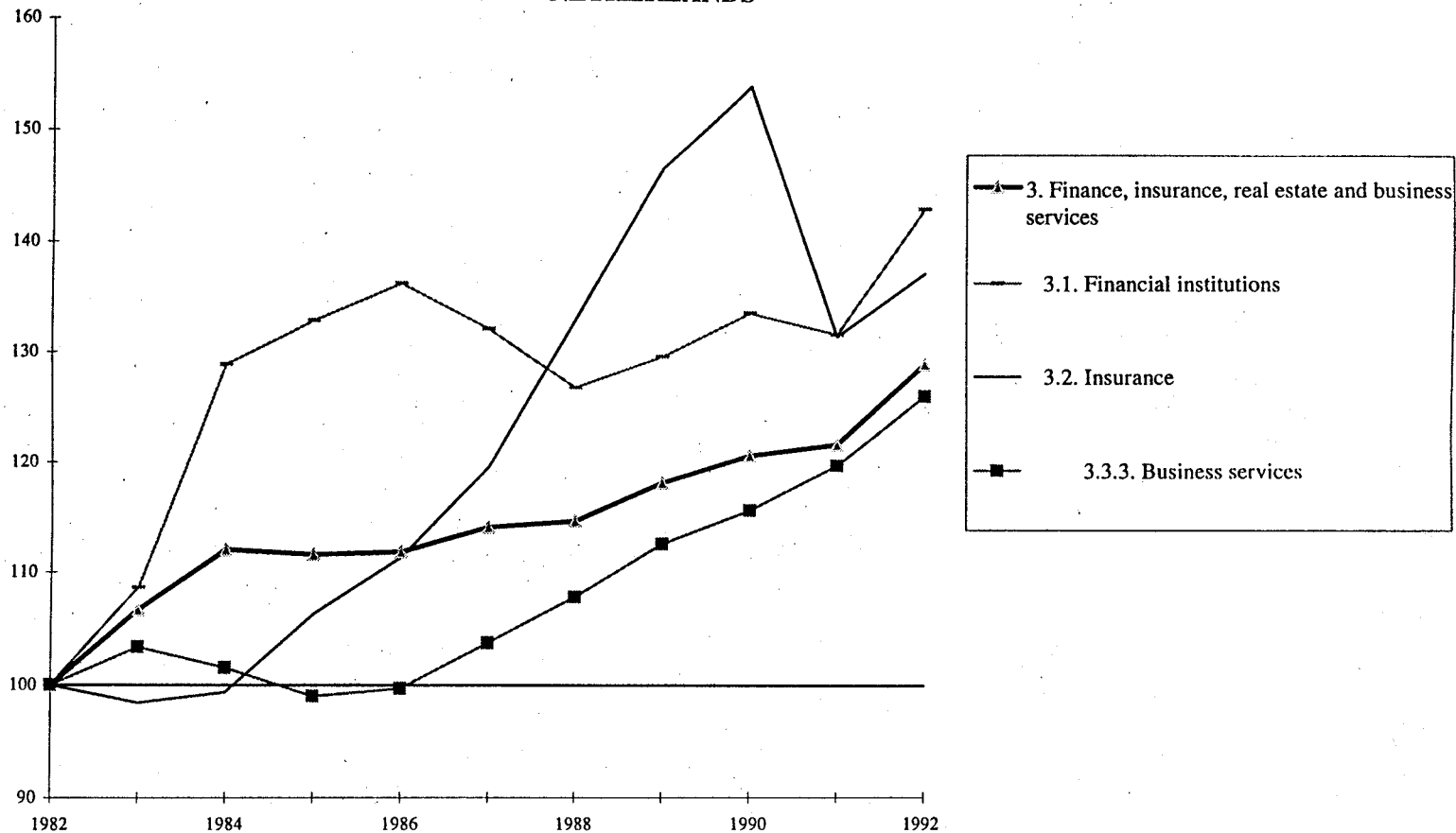
## NETHERLANDS



Source : OECD (Services : Statistics on value added and employment)

## Labour productivity indices, 1982 = 100

### NETHERLANDS



Source : OECD (Services : Statistics on value added and employment)

**SUMMARY TABLE II**  
**TABLEAU RÉCAPITULATIF II**

**CHARACTERISTICS OF EMPLOYMENT ESTIMATES\***  
**CARACTÉRISTIQUES DES ESTIMATIONS DE L'EMPLOI\***

	Coverage				Estimate					
	Employees	Self employed	Family workers	Armed Forces	Job count	Head count	Full time equivalent	12 month average	Midyear estimate	Other
Canada								X		
Canada	X	X	X							
Mexico										
Mexique										
United States				X		X	X	X		
Etats-Unis	X	X								
Japan			X	X	X			X		
Japan	X	X								
Australia			X	X	X					X (6)
Australie	X	X								
New Zealand			X			X		X		
Nouvelle-Zélande	X	X								
Austria			X	X	X			X		
Autriche	X	X								
Belgium			X	X		X			X	
Belgique	X	X								
Czech Republic								X		
République tchèque	X	X								
Denmark			X	X		X		X		
Danemark	X	X								
Finland			X	X		X		X	X	
Finlande	X	X								
France			X	X		X		X		
France	X	X								
Germany			X	X		X		X (1)		X (2)
Allemagne	X	X								
Greece			X			X				
Grèce	X	X								
Iceland			X	X						X (4)
Islande	X	X								
Ireland			X	X		X				X (5)
Irlande	X	X								
Italy			X	X			X (3)		X	
Italie	X	X								
Luxembourg			X	X		X		X		
Luxembourg	X	X								
Netherlands			X	X			X			
Pays-Bas	X	X								
Norway			X	X		X		X		
Norvège	X	X								
Portugal			X	X		X		X		
Portugal	X	X								
Spain			X	X		X		X		
Espagne	X	X								
Sweden			X	X		X		X		
Suède	X	X								
Switzerland			X	X	X			X		
Suisse	X	X								
Turkey			X							
Turquie	X	X								
United Kingdom					X				X	
Royaume-Uni	X	X								
	Salariés	Indépendants	Travailleurs familiaux	Forces armées	Nombre d'emplois	Nombre de personnes	Équivalent plein temps	Moyenne sur 12 mois	Estimation en milieu d'année	Autre
	Population de référence				Estimation					

\* This table contains information available at the time of publication.  
Ce tableau contient les informations disponibles à la date de la publication.

Source : OECD (Services : Statistics on value added and employment).

## **Explanatory notes:**

1. Concerns employees liable to social security contributions.
2. Single annual figure provided by the micro census for self-employed, unpaid family workers and civil servants not liable to social security contributions.
3. Units of labour
4. Man years.
5. Estimates in April each year.
6. Yearly averages of 4 monthly observations.

## **Notes explicatives :**

1. S'applique aux salariés assujettis aux cotisations à la sécurité sociale.
2. Une seule observation annuelle fournie par le "Mikrozensus" pour les travailleurs indépendants, les aides familiaux non rémunérés et les fonctionnaires non assujettis aux cotisations à la sécurité sociale.
3. Unités de travail.
4. Homme années
5. Estimations effectuées au mois d'avril de chaque année.
6. Moyennes annuelles de 4 observations mensuelles.