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STUDIES

*The effects
of the Reduction
of manpower
in the Mining Industry
on Mining Social Security Systems
and Pension Systems
in particular*

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23

**The effects of the Reduction of manpower
in the Mining Industry
on Mining Social Security Systems
and Pension Systems in particular**

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Study drawn up by a group of independent experts
in cooperation with
the Social Affairs Division.

This study only concerns the four principal coal-producing countries among the founder members of the European Coal and Steel Community.

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The present synthesis has been drawn up, on the basis of these national reports, by M. BONNET.

PREFACE

The subject matter of this study is highly technical. But over and above the unbalanced statistics and records there is a human problem in our countries which is caused by the inevitable changes in our energy supply. This problem concerns the men who have to be retrained for other jobs and give up their trade and often a way of life to which they are attached despite its dangers.

Even if all the precautions are taken to ensure that the former miner has the same income in his new job, he will still remain nostalgic about the past and fearful of the unknown and of a new way of life, and these emotions cannot be measured in financial terms.

Economic changes, which are the inevitable consequence of economic progress, are, however, a general problem - farmers, seamen, industrial workers and tradesmen will all have to be retrained, because all the trades and all the sectors of activity are changing. These economic and social changes are currently far more extensive than they were in the past and they are the prerequisite for our economic growth. As the great economist Schumpeter once said very appropriately: our standard of living is higher than that of our ancestors because we work differently, not because we work harder.

Whereas in other times the different sectors of the economy remained for the most part independent of each other, they are now linked together by the interaction of interwoven production and by the interdependence of industries. Everything must progress in step; nothing can remain isolated. This is particularly the case in the poles of growth, which are becoming increasingly important in our modern life.

In the social field this study is a masterly demonstration of this interdependence. The oldest and largest special system in Europe, which was formally self-sufficient now has to call on increasingly national solidarity over and above the occupational classes.

This territorially limited solidarity could become insufficient in the longer term. Moreover, as regards maintaining incomes, readaptation and retraining, the ECSC has long since instituted actual and effective Community solidarity. The new Social Fund extend this financial solidarity to the other economic sectors: The Community, as a factor in economic progress, owes it to itself to guarantee social progress also.

It is this dual human and European aspect which I wanted to stress in this study. I must congratulate its authors, who, with equal intellectual integrity and ability, have given a clean definition of the inevitable correlation between the fate of a social institution and technical an economic developpement in which it lives and has its being.

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INTRODUCTION

1. In the four ECSC countries covered by this study, welfare schemes were introduced for miners long before such provisions were made for other socio-occupational groups, employees in industry and commerce in particular.
2. Demonstrations - admittedly sporadic - of the particular concern of the authorities for mine-workers date back to very early times, as witness, in Germany, the first edicts on mines in the 15th century and, in France, Henri IV's letters patent of 16 May 1604. Several centuries later, the course of history dictated that it should be Napoleon I, influenced by the schemes already in force in Prussia, who, on 26 May 1813, issued a decree founding a welfare fund for the "colliery workers" based in Liège, but he was prevented from extending these facilities throughout France by the events leading up to the troubled times of 1815.
3. In fact, the measures introduced by the State authorities were often preceded by private arrangements initiated by the mine-workers or owners. In Germany, as early as the 13th and 14th centuries, there were already associations known as "Knappschaften" (miners' funds) or "Brüderladen" (fraternal funds) whose purpose it was to provide for the welfare of miners who fell ill or suffered occupational accidents and their surviving dependants.
4. However, it was mainly towards the end of the 18th century and during the first half of the 19th century that, coinciding with the birth of large-scale industry, such social organizations were established and became widespread. With the formation of the big mining companies, the owners were confronted with new obligations as a result of the concentration of large numbers of workers in certain regions.

To deal with a social problem which was now one of major dimensions, the mine concession holders established or promoted welfare institutions in order to strengthen the allegiance of their workers to the mines and foster an atmosphere of social peace which was an essential factor contributing to the productivity of their undertakings. This led to the creation of autonomous, private associations: in Belgium, between 1839 and 1841, the mine-workers' provident funds (one provident fund for each coalfield) and, in France, the miners' relief societies, of which there were 146, covering 98% of workers employed in the coal-mines, by the end of 1883.

5. This was the appropriate stage for the State authorities to intervene in order to coordinate and supplement, or to replace, the facilities provided by the private sector. They created systems which, although extensively improved and having undergone substantial structural modification, still survive today.

6. The general laws on mines passed on 14 June 1865 in Prussia and 20 March 1869 in Bavaria were examples of legislation introduced to this purpose. These laws entrusted the administration of social insurance to associations of funds which enjoyed a very large measure of administrative autonomy.

By contrast, for the body of employed persons as a whole, the basic laws on social security were not passed until 15 June 1883 (sickness benefits) and 22 June 1889 (disablement and old-age benefits).

The following is a list of the principal German laws on miners' funds: the law of 23 June 1923 establishing a miners' fund (Knappschaftsverein), that of 1926 (establishment of the Reich miners' fund), the law of 7 December 1933 on the maintenance of disablement benefits for workers, staff and miners, the order of 4 October 1942 introducing new regulations for miners' pensions, the law of 21 May 1957 introducing new regulations for miners' pensions and the amendments thereto, in particular those contained in the law of 9 June 1965, and finally the law of 28 July 1969 establishing the BUNDESKNAPPSCHAFT.

7. In France, the first instance of State intervention in the establishment of a statutory welfare system for mine-workers was the law of 29 June 1894, one of the main provisions

of which was the formation of the Miners' Relief Societies which were responsible for the administration of sickness and maternity benefits. This law was followed up twenty years later by that of 25 February 1914, under the terms of which the Autonomous Fund for Mine-workers' Pensions was founded as a body having nationwide terms of reference.

Employees in industry and commerce had to wait until the laws of 5 April 1928 and 30 April 1930 before they were to obtain a social security system.

The present social security system for miners operates in accordance with the principles laid down in the constitutional decree of 27 November 1946 which introduced reforms for miners' social security similar to those brought into effect for the general social security system by the order of 4 October 1945.

8. In Belgium, the law of 28 March 1868 established, on a voluntary, subsidized basis, an official old-age and death welfare system for mine-workers. This system was reorganized and made compulsory under the terms of the law of 5 June 1911 and it underwent structural modifications introduced by royal decree on 28 August and 1 October 1911. The administrative bodies nevertheless continued to be known as provident funds.

It was to be many years before parallel legislation was introduced for employees as a whole: the laws of 10 May 1900 (voluntary subsidized system) and 10 December 1924 (compulsory system).

The autonomy of the system for miners was reinforced by the law of 20 August 1920, which set up a single administrative body for all the provident funds called the "National Mine-workers' Pension Fund", whose original role was essentially financial, but was later extended (laws of 9 April 1922 and 30 December 1924, legislative decree of 10 January 1945) to include direct action in the field of welfare.

9. In the Netherlands, legislation was not introduced until later. It was not until 1 August 1919, following the setting up of the General Mine-workers' Fund (AMF) on 6 December 1918, that a uniform system of pensions for mine-workers came into force to supersede the provisions of the

company rules by which pension arrangements had been governed until that date. In the case of staff, company schemes survived until the end of 1953, since the Mining Staff Fund (BFM), which was set up on 30 December 1952 to cover the whole of the mining industry, only became operational on 1 January 1954.

The general laws on old-age benefits, widows' and orphans' benefits, family allowances, sickness benefits, major medical risks and long-term unfitness for work have, as will be seen later, had a considerable influence on the systems in operation for miners.

10. Needless to say, apart from the legal provisions referred to above, the social welfare systems for miners have, in all four countries, undergone numerous improvements under the terms of laws and regulations on their way to becoming the welfare systems as they are known today.
11. Whereas in the Netherlands the special social security system for miners was created essentially for the workers in the coal-mines, in the other three countries, personnel employed in other industries and other types of mine have always been included. It is nevertheless true that, in these latter countries, coal-miners occupy a dominant position in numerical terms.
12. The decline in coal production (which has been particularly marked in Belgium, France and the Netherlands) in the face of competition from other sources of energy, the rundown of outlets and the increased winning costs, together with the effects of increased productivity through the mechanization and rationalization of the coal industry, have caused a substantial reduction in the number of workers over recent years. This rundown of the labour force will be even more marked over the years to come, thus aggravating the imbalance of the demographic structures of the welfare systems: fewer people paying in contributions, more drawing benefits, ageing of the population covered.
13. The operation of social security systems for miners is closely related to the progress of the industry, economic change and the development of other sources of energy. However, these factors are compounded by others of an internal

nature relating to the demographic structures of the systems, the extent of cover they provide, their technical organization and the financial machinery applied in their administration ... To these must be added considerations of a political or social nature, which accelerate or hold back development.

14. In the four countries, therefore, the causes may be similar (with differences of degree) but their consequences are not necessarily the same. This is attributable to the fundamental differences between the national social security systems for miners, particularly as regards their fields of application, their technical and financial structures and the benefits which are granted under them (Part One).
15. The variation of degree of impact has clearly given rise to different solutions. It will also influence the development of the institutions during the years to come (Part Two).

PART ONE

SOCIAL SECURITY SYSTEMS FOR MINERS:
DIFFERENT STRUCTURES TO ACHIEVE IDENTICAL OBJECTIVES

CHAPTER I

FUNDAMENTAL DIFFERENCES BETWEEN
NATIONAL SOCIAL SECURITY SYSTEMS FOR MINERS

16. The national social security systems for miners are based on different underlying principles and present significant dissimilarities in their technical structures, their fields of application, their beneficiaries and, finally, in the benefits for which they provide.

SECTION I - DOCTRINAL CONCEPTS

17. In the Federal Republic of Germany, Belgium, France and the Netherlands, special social security systems for miners have always been introduced before the general systems for employees as a whole. However, in all four countries, the generalized application of social security measures has led to increasing similarity in the benefits provided for under the general systems and those for miners and, in certain cases, to the establishment of a degree of financial interdependence.
18. Examination of the principles underlying the different social security systems reveals an essential difference between the Netherlands system on one hand and, on the other hand, the systems adopted by the other three countries: the Federal Republic of Germany, Belgium and France.

A - THE NETHERLANDS

19. The originality of the development of social security arrangements in the Netherlands since the last World War lies in the fact that the special social security systems for miners and other occupations have been complemented by a national social security system comprising:
- a) The general social security (or national insurance) laws applicable to the population as a whole: general law on

old-age benefits (AOW), general law on widows' and orphans' benefits (AWW), general law on family allowances (AKW), general law on major medical risks (AWBZ);

b) A set of laws applicable to employees specifically, covering sickness benefits (ZW), long-term unfitness for work (WAO), unemployment benefits (WW), employed persons' family allowances (KWL);

c) Finally, the laws for the underprivileged (persons whose earnings or incomes are below a certain threshold): law on medical care benefits (ZFW), law on family allowances for low income groups (KKZ).

20. The national insurance system is financed by uniform fiscal contributions payable on earnings up to a ceiling which has been 18,000 guilders since 1 January 1971. The financial administration of each general law is handled separately by specialized agencies dealing with specific areas of distribution of benefits.

The financing of the special set of laws for employed persons is broken down, according to the system of distribution, by branches of occupational activity, and is drawn from contributions payable by employees and employers up to a ceiling of 96 guilders per day, which has been in force since 1 January 1971.

The financing of family allowances for low-income groups is provided entirely by the State, which also contributes to the financing of medical care benefits (ZFW), in respect of which the contributions ceiling is, at all events, fixed at a very low level (currently 55 guilders per day).

21. The systems established under the general law on major medical risks (AWBZ), the law on long-term unfitness for work (WAO) and the law on family allowances for employed persons (KWL) are applicable to mine-workers, who do not enjoy any special treatment as regards benefits. On the other hand, in the cases of generalized old-age benefits (AOW), widows' and orphans' benefits (AWW) and medical care benefits (ZFW), mine-workers are granted advantages over and above those provided under the common law system. Moreover, special regulations are applicable in the field of interim compensation prior to

unemployment benefits (WW) and that of sickness benefits (ZW). Finally, beside the allowances payable pursuant to the general law on family allowances (AKW), additional benefits are granted in respect of the third and subsequent children under the terms of the regulation on supplementary family allowances for personnel in the service of the Netherlands coal industry (cf. No. 90 below).

22. There was bound to be considerable overlapping between the special and national welfare systems as a result of the implementation of the set of laws described above, irrespective of the fact that the rundown and forthcoming complete disappearance of the mining labour force also rendered it necessary. Indeed, the four general laws are based on the principle of universal availability of cover. The laws on sickness benefits and long-term unfitness for work benefits (WAO) are distinguished by the fact that compensation is conditional only on the employee's unfitness for work, without regard to the cause of this unfitness or the manner in which it arose.

B - FEDERAL REPUBLIC OF GERMANY, BELGIUM AND FRANCE

23. The general systems in Germany, Belgium and France are based on entirely different principles from those described above. They were created originally as special systems for mine-workers, exclusively for employees, and their fields of application were subsequently extended to include other socio-occupational categories, although this did not cause any departure from the original principles. In each of these countries, the special social security system for miners is developing in parallel with the general system, which it antedates.

Moreover, this parallel development was only to occur in categories of risks or benefits traditionally covered by "social insurance". It is precisely in the area of these benefits, which now form a branch of social security, that the distinguishing features of the special systems become apparent. As regards occupational accidents and illness, mine-workers have never enjoyed cover not available to employed persons as a whole. The family benefits they receive are also those provided under general legislation.

24. The development of the general welfare systems and the special systems for miners in the Federal Republic of Germany and France has led, in the case of certain categories of benefits, to the simultaneous application of general provisions and special measures for mine-workers.

25. For example, in the Federal Republic of Germany, mine-workers are entitled, subject to the conditions of the general system, to the benefits of occupational disablement pensions, general disablement pensions, old-age pensions at the statutory age or on early retirement (unemployed and female insureds), widows' and widowers' pensions and orphans' allowances. In addition to these benefits, mine-workers also receive other forms of benefits (cf. below, Ch. II).

26. Similarly, in France, coordination between the general and special social security systems has been achieved through the introduction of a number of regulations. These provide that periods of contributions under either system are aggregated and considered cumulatively in the assessment of entitlement to benefits.

Benefits in respect of sickness, maternity, disablement and death are payable under only one of the systems, this being the system under which the insured is covered at the time of the eventuality giving rise to entitlement to benefits.

In the case of old-age benefits, the costs are shared between the systems under which contributions are paid. This sharing of costs is always based on the benefits provided for under the general legislation, to the exclusion of special benefits under the miners' system. Where appropriate, supplementary pensions are allocated under the system concerned when the pension as determined by the cost-sharing arrangement is lower than the benefits which would be payable under the said system in respect of years of service since 1 July 1930, the date on which the general social security system came into force. At all events, pensions in respect of years of service in the mines before the establishment of the general system are payable under the miners' social security system.

27. In Belgium the overlapping of the miners' system and the general system has now reached a very advanced stage.

Royal decree No. 50 of 24 October 1967 set up a single system for retirement and surviving dependants' pensions for all employed persons, so that, from 1 January 1968, the four systems which had been operated previously for the benefit of workers, staff, seamen and mine-workers were merged.

Following this integration, apart from a few preferential rules concerning the allocation of certain retirement benefits and surviving dependants' benefits, there remain only two types of special benefits for miners: disablement pensions and annual holiday gratuities, for underground workers.

SECTION II - FIELD OF APPLICATION AND ADMINISTRATIVE ORGANIZATION

A - FIELD OF APPLICATION

28. There are significant differences between the national systems, both as regards the persons covered and the circumstances against which cover is provided.

1 - Persons covered

29. The point which the systems of the four countries have in common is that they are primarily concerned with coal-mine workers. However, from this common point of departure, they have developed in their different ways over the years.
30. The Netherlands special system, which was created for the workers in the coal-mines, is also applicable to personnel employed in certain related activities of the mining undertakings (power stations, brickworks, workshops covered) and the workers of the chemicals division of *Nederlense Staatsmijnen NV*.

The Belgian special system covers, in addition to mines, quarries exploiting underground resources.

In the Federal Republic of Germany, the pension benefits for miners are provided for the workers and staff of certain steel undertakings as well as those of mining undertakings.

The French system, for its part, only includes slate quarries to the exclusion of all other types, but includes a number of products which are excluded from the special systems in other countries. The workers of undertakings mining deposits of refractory and china clay in timbered underground roadways have recently been admitted to the

special system, but only for cover against old-age, disablement, death (dependants' pensions).

31. In the Federal Republic of Germany, France and the Netherlands, all the employees of undertakings included are beneficiaries under the special system; in Belgium, only manual workers are beneficiaries, to the exclusion of staff.

32. Finally, in the Federal Republic of Germany, Belgium and France the special system is extended to include "assimilated" undertakings which employ personnel who do not have, or no longer have, any direct links with mining proper: undertakings carrying out certain types of work on behalf of mines, ancillary industries, factories manufacturing by-products, coking plant, industrial undertakings not included under the mining system, but which employ redeployed mine-workers, trade union officials and employees of mining trade union or social organizations, apprentices, etc. Clearly, in the case of Belgium, the list of such persons only covers manual workers, to the exclusion of staff.

33. The numbers of persons subscribing to the four national miners' social security systems vary widely from one country to another. At the end of 1970, there were 355,000 in the Federal Republic of Germany, 164,600 in France and 38,000 in Belgium. Of these, coal-miners represented approximately 75% in the Federal Republic of Germany, 78.5% in France and almost 99% in Belgium. These figures demonstrate the extent to which the development of the population structure of the coal industry is of decisive importance to the future of miners' social security systems.

At that time (end of 1970), in the Netherlands, there were 24,600 subscribers to the mine-workers' fund (AMF), and 6,400 subscribers to the mine staff fund (BFM). Active mine employees accounted for 11,400 and 2,100 of the subscribers to the AMF and BFM respectively.

2 - Circumstances against which cover is provided

34. The cover extended to the socio-occupational groups referred to above includes all the branches of insurance listed in ILO Convention No. 102 - 1952.

However, in certain branches of insurance or categories of benefits, the facilities afforded are the same as those

under the general social security systems. In all four countries, this is true of unemployment, family benefits and cover against occupational accidents and illness.

In particular, it will be remembered that in the Netherlands, since 1 July 1967, when new laws on sickness benefits and long-term unfitness benefits were introduced, no distinction has been made on the basis of the cause of unfitness for work; the cover is the same irrespective of the cause of unfitness or sickness.

35. Whereas in the Federal Republic of Germany, Belgium and the Netherlands, family benefits are distributed by institutions which are open to all, this is not true of France, where the special social security system for miners administers all branches of insurance, with the single exception of unemployment benefits, on behalf of the miners and their families.
36. There are several differences in the fields of sickness, disablement, old-age benefits and widows' pensions:
37. Mine-workers have an autonomous organization for sickness and maternity benefits in France (Sociétés de secours minières) and in the Federal Republic of Germany (Bundeskknappschaft), although, in the latter country, there are only special arrangements for medical care.
- In Belgium, the benefits of health insurance are available to all, and mine-workers and those falling into the same category are entitled to the same benefits as other employees.
- Finally, in the Netherlands, mining undertakings are allowed under the terms of the general law on sickness benefits to cover their own risks. This provision has resulted in certain advantages for mine-workers, details of which will be given later in the report.
38. Disablement is covered by the miners' system in the Federal Republic of Germany (Bundeskknappschaft), in Belgium (FNROM) and in France (Caisse autonome nationale de la Sécurité sociale dans les mines).

39. In Belgium, old-age and widows' pensions are distributed by the general social security system organizations. In the Federal Republic of Germany, France and the Netherlands, they are still dealt with largely - but with proportional variations from country to country - under the special miners' social security system.

B - ADMINISTRATIVE ORGANIZATION

40. As matters stand at present, France is without doubt the country which has the most sophisticated special welfare organization for mine-workers. Indeed, the French social security system for miners is unique in that it handles all risks, benefits being administered by autonomous institutions which deal with the various branches of insurance.

Sickness and maternity benefits are handled by 43 local bodies called "Sociétés de secours minières" which, although substantially modified structurally, are the direct descendants of the institutions set up under the law of 29 June 1894. They also deal with temporary unfitness for work caused by occupational accidents and illnesses, except in the case of workers employed by undertakings (coalfields nationalized under the decree of 18 September 1948 and other legislative measures) which have been authorized to handle such benefits themselves.

Compensation for permanent unfitness for work caused by occupational accidents and illnesses are dealt with by seven regional bodies called "Unions régionales de Sociétés de secours minières".

The "Unions régionales", with the exception of that for the West of France, also deal with family benefits for mine-workers and their dependants. Insofar as their handling of these benefits is concerned, the "Unions régionales" are treated on the same basis as family allowances funds from the point of view of financial regulations, the ministry under whose authority they fall, and supervision.

Finally, miners' and widows' pensions are provided and distributed by the "Caisse autonome nationale de la sécurité sociale dans les mines", which took over this function in 1946 from the "Caisse autonome de retraites des ouvriers mineurs", which was set up under the law of 25 February 1914.

41. In the Federal Republic of Germany, the law of 28 July 1969 abolished the eight formerly autonomous miners' funds ("KNAPPSCHAFTEN") and the "Joint Office of Miners' Funds" with effect from 1 August 1969, and replaced them by the "Federal Mine-workers' Insurance Fund" ("BUNDESKNAPPSCHAFT"), which has its headquarters at BOCHUM. The competence of the offices of this new Institution extends to both pension benefits and sickness benefits. There is, however, a degree of decentralization in that there are outside departments. The Federal Insurance Department ("BUNDESVERSICHERUNGSSAMT") is responsible for the legal supervision of the BUNDESKNAPPSCHAFT.

For family benefits and occupational accident and illness benefits, mine-workers are included in the general system, although, in the case of occupational accidents and illness, the insurer is the mines trade association ("Bergbau-Berufsgenossenschaft").

42. Since the reforms introduced in Belgium by the Royal Decree of 24 October 1967, the competence of the National Mine-workers' Pension Fund ("Fonds national de retraites des ouvriers mineurs") and the five provident funds under it, each of which is geographically responsible for one of the five coalfields, has been restricted to disablement pensions and holiday gratuities. For all other branches of insurance or benefits, mine-workers are served by the institutions of the general social security system. However, the "Fonds national de retraites des ouvriers mineurs" remains responsible for centralizing the collection of the subscriptions and contributions of mine-workers and assimilated workers in respect of the various branches of insurance and allocating them to the bodies which distribute them.

43. In the Netherlands, the system of pensions for the mining industry is administered by two Institutions: the General Mine-workers' Fund (AMF) for manual labour and the Mining Staff Fund (BFM). In addition, individual undertakings have supplementary systems for executives and managers.

Under the AMF system, medical care insurance and part of sickness insurance are dealt with by two separate sickness funds, one for medical care and the other for cash benefits.

On 1 January 1971, the BFM transferred its medical care insurance to a national medical care body, but retains its administrative responsibilities for the persons it had insured formerly.

The AMF and the BFM jointly created the South Limbourg Administrative Office (Administratiekantoor Zuid-Limburg = AZL), to which the two Funds have delegated their administrative functions.

The AZL also administers the "Mining Industry Trade Association".

This body fulfils two roles:

- pursuant to the law on the organization of social insurance (Organisatiewet sociale Verzekering), it is responsible for the implementation of the laws on unemployment benefits (WW) and sickness benefits (ZW) insofar as they affect the working population in the mines as a whole; it should be noted, however, that the mining undertakings, availing themselves of the facility afforded them by the relevant law, administer their own sickness benefits risks under the supervision of the Mining Industry Trade Association;
- it is also instrumental in the implementation of the law on long-term unfitness for work (WAO), the main responsibility for which lies with the General Fund for Insurance against Unfitness for Work (Algemeen Arbeidsongeschiktheidsfond). Indeed, not only does this law grant benefits in the event of unfitness for work on the expiry of the period covered by the law on sickness benefits (ZW), but, during the period covered by the ZW, it also covers the cost of functional and occupational retraining and also occupational re-education and redeployment.

SECTION III - FINANCING

A - FINANCING OF DISABLEMENT, OLD-AGE, DEATH (widows' pensions) BENEFITS

44. In all four countries, the pensions systems are financed by earnings-related contributions and State contributions. In certain cases, recourse is had to other sources of revenue.

1 - Earnings on which contributions are payable

45. Except in Belgium, where contributions are payable on total earnings, they are payable up to certain ceilings only.
46. In France, the ceiling for earnings on which contributions to the miners' system are payable is the same as that for the general system. This ceiling, which is established on the basis of the general trend of earnings, was 19,800 francs in 1971 and was raised to 21,960 francs on 1 January 1972.
47. It is higher in the Federal Republic of Germany, where it corresponds roughly to two and a half times the general basis of calculation, whereas it is double this basis in the general system. Thus, the ceiling of earnings on which contributions are payable was 27,600 DM in 1971 in the miners' system as against 22,800 DM in the general system, the general bases of calculation being 11,083 and 10,967 DM respectively. According to estimates, by 1975, the ceilings will be 38,400 DM in the miners' system and 31,200 DM in the general system, the general bases of calculation being 15,660 DM and 15,495 DM respectively.
48. In the Netherlands, since 1 January 1971, earnings on which contributions are payable, in the case of both workers and staff, have been 86% of earnings on which contributions are payable under the general law on old-age pensions. However, no ceiling is applied to deductions from workers' pay, whereas the earnings ceiling on which staff pay contributions is 23,948 guilders.

49. 2 - Rate of contributions

- The Netherlands is the only country where equal contributions are paid by employers and employees, and this is only true in the case of the workers' system (AMF). Under the staff system in this country, as in the Federal Republic of Germany, Belgium and France, the employer's contribution is higher than the employee's.
50. In the Netherlands, the employer and the employee each contribute 4.05% of the amount of earnings on which contributions are payable. Mine staff pay 4.5% of their tax-free earnings (8,683 guilders in 1971) + 8% on the balance of their earnings up to the ceiling of earnings on which contributions

are payable under the AOW (in 1971: 18,800 - 8,683 guilders) + 10% on the remainder (23,948 - 18,800). The employer's contribution on each of these three portions of the employee's earnings are respectively: 4.5%, 12.5% and 15.25%.

In addition to these contributions, the parties concerned are also required to pay contributions in respect of the general laws on old-age benefits and widows' and orphans' benefits. The rates of contribution for these two types of benefits are 9.9% and 1.5% of earnings up the ceiling applied to national insurance schemes (18,800 guilders in 1971).

51. In France, the contributions payable by workers and employers are 6% and 6.25% respectively of the ceiling incomes.
52. In the Federal Republic of Germany, the amount of contributions, which has not been modified since 1957, is 23.5% of earnings on which contributions are payable, 8.5% being paid by the insured, and 15% by the employer.
53. In Belgium, mine-workers have been paying contributions at the rate of 6% since 1 July 1971, and the employers' rate of contributions has been 8% since 1 July 1970.

3 - The State contribution

54. In the Federal Republic of Germany, the State's contribution takes the form of a balancing subsidy the amount of which is not defined by law, the Bund being required to make good any deficit between revenue and expenditure.
55. In the Netherlands, the State's contribution to miners' funds has developed as follows:

In order to meet a back-service obligation taken over from the pensions fund by the authorities, the State first undertook to pay 400,000 guilders each year into the AMF pension fund pursuant to the law on mine-workers' disablement of 21 April 1933 and 6 million guilders pursuant to the law of 1 July 1948.

Among the forms of aid granted to the mining industry in order to compensate for the excess manpower in this sector, the following annual contributions should be mentioned: contributions to the AMF pension fund: 1.2% of the total

payroll under the law of 1 July 1948, and 21.5 million guilders under the law of 1 August 1964;
contribution to the AMF sickness fund: 2.5 million guilders (law of 1 August 1964);
contribution to the BFM pension fund: 1.5 million guilders (law of 1 August 1964).

This aid, together with the "objective" aid granted to the undertakings, covers the excess manpower in the mining industry.

The abnormal costs to the mining industry of these pension systems can be determined by comparing:

- on one hand, the difference between the contribution which would correspond to the cost price of all the AMF and BFM pension systems, and the contribution corresponding to the cost price of these same pension systems if old-age pensions were not awarded until the age of 65;
- on the other hand, the total earnings on which contributions are payable to the various pension funds during the course of the year under consideration in the solid fuels sector of the mining industry.

56. In France, as in the Netherlands, the notion of excess manpower is taken into consideration in the establishment of the State contribution. The State contributes to the financing of the pensions system in two forms. Firstly, by the terms of the law, it makes an annual contribution corresponding to 22% of the ceiling incomes. In addition, insofar as is necessary, it makes a further contribution designed to maintain the balance of the Special Retirement Pension Fund in the light of the trend in the population structure of the persons covered by the special systems. This further contribution is, at most, equal to the amount by which it is necessary to increase insurance resources as a whole (workers' and employers' contributions, inter-occupational compensation, normal State contribution) in order to cover the variation, as against the base date of 31 December 1960, of the number of holders of old-age and other pensions for every hundred persons paying contributions as at 31 December of the previous year.

57. As we know, in Belgium, mine-workers' retirement pensions have been included under the general system of pensions since 1 January 1968. The State subsidy is therefore in respect of all retirement pension systems. This subsidy was 6,000 million francs in 1968, which was increased by 4% in 1969. With effect from 1 January 1970, in addition to being related to the cost of living index, the subsidy is increased by 6% each year.

The State is also responsible for virtually all the costs arising out of disablement pensions awarded to mine-workers (see No. 203 below).

4 - Financial ties with the general system

58. In the three countries (Federal Republic of Germany, France, the Netherlands) where the miners' pension systems have remained independent, there are nevertheless increasing financial ties with the general systems. These ties take different forms.
59. In the Netherlands, they have arisen largely out of the application of the general laws on old-age benefits (AOW), widows' and orphans' benefits (AWW) and long-term unfitness for work (WAO). In fact, the miners' old-age and dependants' pensions have clashed with the benefits provided under the AOW and AWW since 1 January 1959, and this has caused modifications to be introduced into the financial arrangements of the general funds for workers and staff (modification of the rate and income ceilings for contributions).
- More recently, the introduction on 1 July 1967 of the law on long-term unfitness for work (WAO) had the effect of abolishing miners' disablement pensions which were substituted by those provided under the newly instituted general system. This substitution had the effect of making funds available for the improvement of old-age pensions.
60. In the Federal Republic of Germany, the financial ties with the general system take the form of workers' and staff pension insurance payments designed to reimburse certain costs and parts of pensions, or to compensate for workers' changeover from mining to other types of work. The volume of these general system payments has risen steadily with the number of foreshortened careers in mining. In 1970, these reimbursements

accounted for 23.47% (1,435/6,113 million DM) of miners' pension insurance revenue, as against 7.30% (47/643 million DM) in 1950. However, it seems probable that the proportion of miners' pension insurance revenue accounted for by these payments will fall slightly during the next few years. According to the estimates, by 1975, they will account for 20.36% (1,906/9,362 million DM) of the total.

61. In France, on the other hand, a system of inter-occupational compensation of old-age insurance costs was set up for the benefit of the miners' system on 1 January 1964 (Article 73 of Finance Law No. 63-1241 of 19 December 1963). Under this arrangement, each year, the Caisse nationale d'assurance vieillesse des travailleurs salariés pays the Caisse autonome nationale de la sécurité sociale dans les mines a compensatory subsidy, the amount of which is determined by ministerial order on the basis of the ratio between the number of persons drawing normal, proportional or old-age pensions of at least 64 years of age and the number of persons paying old-age insurance contributions under the miners' system and the general system respectively. For the year 1970, the amount of this inter-occupational compensatory subsidy was 504.3 million francs, representing 26.76% of insurance expenditure. In 1971, it was raised to 595 million francs, approximately 30% of insurance expenditure.

B - FINANCING OF SICKNESS AND MATERNITY BENEFITS

62. In the Federal Republic of Germany, the contributions of actively employed insureds are payable on gross earnings up to a contribution ceiling currently corresponding to 75% of the contribution ceiling for workers' pension insurance. The employer and employee each pay half the contribution, which is currently 9.60% of the ceiling income in the case of workers and 11.32% in the case of staff (staff receive additional benefits in the event of their requiring hospital treatment). Pensioners are not required to pay contributions.

The sickness insurance revenue from contributions is supplemented by reimbursements made either by the Bund or from pensions insurance funds. For each maternity allowance granted to an actively employed insured woman, a lump-sum reimbursement of 400 DM is made by the Bund. Furthermore, the miners' pension insurance fund reimburses all costs of pensioners'

sickness benefits. A further contribution to this latter form of insurance - amounting to 27% of costs - is made by the workers' and staff pension insurance systems.

The Bundesknappschaft fixes the rate of contributions at a level which will enable them, together with other revenue, to cover expenditure.

63. In France, until the end of 1971, sickness, maternity and death benefits were financed entirely out of contributions. The rate of contributions paid by actively employed subscribers is currently 4% of earnings up to the general social security system ceiling. For his part, the employer pays a contribution of 9.75% of the ceiling incomes and a further contribution of 2% on his total payroll.

For the provision of benefits to pensioners, the overall rate of contributions corresponds to 15% of pensions, of which 5% is deducted from the pension and 10% is borne by the national miners' retirement pensions organization. The 10% contribution, which is paid directly to the Miners' Relief Societies by the Caisse autonome nationale, is insufficient to cover the costs of benefits. When the proceeds of contributions from both the actively employed and pensioners are added, there remains a substantial deficit, which in the year 1970 alone was 16.82% of revenue.

As is mentioned later in this report (cf. Nos. 242 and 243), in order to mitigate the effects of the unfavourable population structures, Article 73 of the finance law for 1972 (Law No. 71-1061 of 29 December 1971) provided for the establishment, with effect from 1 January 1972, of a system of financial compensation between the sickness insurance systems for employees in commerce and industry on one hand and, on the other hand, miners, wage-earning seamen and the personnel of the independent Paris transport authority. Under these new provisions, the miners' sickness and maternity benefits system will henceforth receive compensatory subsidies for the provision of sickness and maternity benefits in kind from the Caisse nationale d'assurance maladie des travailleurs salariés.

64. There is no specific problem in this field in Belgium, where there is no longer a special system of sickness and maternity benefits for miners; the benefits are allocated by

the general system organizations.

It should be noted, however, that unlike the arrangements for other employees, the contribution paid by mine-workers (2.6%) is assessed on total income (the employer's contribution being 3%). Of the total contribution of 5.6%, 3.85% is for medical care and 1.75% for compensation.

The explanation for this difference of treatment lies in the fact that there is a narrower range of earnings among mine-workers than among other employees and by the spirit of solidarity in mining communities. Moreover, the absence of a ceiling to earnings on which contributions are paid is compensated for by a difference in the rate of contributions, which is higher for other categories of employees (medical care, 5.75%; compensation, 3%).

The State contributes to the financing of sickness benefits by bearing a substantial proportion of the costs of both medical care (95% of the cost of treatment of social illnesses: mental illnesses, tuberculosis, cancer, poliomyelitis, congenital diseases and malformations; 27% of the costs of other medical care), and compensation in specie (50% of disablement compensation during the first two years, 95% thereafter; 95% of the cost of allowances for funeral expenses). The State also makes up the contributions of unemployed workers.

65. In the Netherlands, the law on sickness benefits (ZW) is applicable to all workers. It is financed by branch of activity, according to the distribution system, and implemented by the trade association (BV) of the branch of industry concerned. Thus, in the case of workers in the mining industry, the mining industry trade association is responsible for implementing the law, but - as has been mentioned above - its administrative functions have been entrusted to the South Limbourg Administrative Office.

It should be noted that the AMF sickness fund has always been operated within the framework of the law on medical care insurance (ZFW). By contrast, the staff medical care insurance arranged through the BFM sickness fund - which has now been abolished - was a non-statutory collective insurance designed mainly for persons whose income exceeded the ceiling laid down by the ZFW.

In 1968, in both funds, medical care insurance was divided into two schemes, one for the actively employed and the other for pensioners. At the same time, it was agreed that the pension funds concerned would in future bear the costs of the insurance of pensioners.

In the meantime, as has been seen above (cf. No. 43), the BFM abolished its own medical care insurance. Insofar as they could be brought into the statutory insurance system, the BFM members (actively employed and pensioners) were absorbed into the AMF insurance system. The others are currently insured by a national medical care insurer.

The AMF is attempting to bring about a merger with another general sickness fund in this field. Any losses suffered by pensioners will be compensated by the pension funds.

C - FINANCING OF INSURANCE AGAINST OCCUPATIONAL ACCIDENTS AND ILLNESS

66. There is little to be said on this branch of insurance in Belgium and the Netherlands.

67. In fact, in Belgium, mine-workers are covered by the general compensation system provided for all workers who sustain occupational accidents or illnesses. There was therefore no need for special financing of the social cover which they receive in this field.

It should be noted, however, that the State provides assistance to offset the additional cost of providing compensation for cases of pneumoconiosis caused by underground work in the mines in accordance with the provisions of the law of 24 December 1963. This assistance has taken the form of subsidies, the amount of which was 65% of costs in 1970 (60% in 1969, 55% in 1968, 50% between 1964 and 1967).

68. In the Netherlands, mine-workers are covered against occupational accidents and illness under the general system of protection established by the laws on sickness insurance (ZW) and insurance against unfitness for work (WAO). As stated above, no distinction is made in the latter law as to whether the unfitness for work carrying entitlement to benefits is caused by occupational or non-occupational accidents or illnesses.

69. In the Federal Republic of Germany and France, mine-workers are also covered against occupational accidents and illnesses under the general legislation for all categories of employees. In these two countries, there are no provisions similar to those in force in the Netherlands since 1 July 1967, and, as in Belgium, the cover applies to occupational risks only.

70. Comparison of the German and French systems reveals considerable similarities from the point of view of financing procedures and problems. Whereas in France, the insurers are institutions of the special mining social security system (Sociétés de secours minières and Unions régionales), in the Federal Republic of Germany, the administration of insurance in the industrial sector has been entrusted to trade associations covering certain branches of activity. In the case of mining, the administration of insurance is the responsibility of the mining trade association (BERGBAU-BERUFGENOSSENSCHAFT). In both countries, this branch of insurance is financed entirely by the employers on the basis of a cost-sharing system.

71. The mechanisms applied in the Federal Republic of Germany are similar to those used in France between 1947 and 1964. Indeed, in the Federal Republic of Germany, insurance costs must, in principle, be borne by the trade association concerned. Each year, the costs are shared on the basis of a scale of risks between the various undertakings affiliated to the trade association. The same procedure was observed under the tariff system established in France in 1948, which was also based on the sharing of all costs among the undertakings concerned.

However, such systems can only function successfully as long as there remains a close relationship between rising costs and a rising overall payroll from which resources are drawn. In a contracting industry, the balance of this relationship is broken: with the closure of pits, an ever-decreasing number of undertakings is required to meet an ever-rising burden of costs.

72. The German and French governments have sought to resolve these difficulties by means of systems of inter-occupational compensation, the principles of which were laid

down by the law of 21 December 1967 in the Federal Republic of Germany and by Article 73 of the finance law of 19 December 1963 in France.

D - FINANCING OF FAMILY BENEFITS

73. France is the only country whose system of family benefits for mine-workers warrants consideration in this report, since in the other three countries, they are granted by the institutions responsible for the nation as a whole.
74. In France, the administration of family benefits for mine-workers and assimilated workers, which was originally entrusted, under the terms of the constitutional decree of 27 November 1946, to the Sociétés de secours minières, was subsequently transferred to the Unions régionales, pursuant to the decree of 23 March 1954. These Unions régionales are included in the general system family allowances funds' compensatory scheme. Consequently, the contribution to cover family allowances, which is borne entirely by the employer, is clearly paid at the same rate as that laid down in the general social security system.
75. The Caisse nationale d'allocations familiales provides subsidies in order to maintain financial balance, in accordance with conditions laid down by a ministerial order. In 1970, these subsidies amounted to 45.13% of expenditure (224.63 million francs in subsidies as against expenditure of 497.76 million francs).
76. The deficit of the family benefits branch of the Unions régionales is attributable largely to the fact that mining undertakings have an almost entirely male labour force, with the result that the number of dependent children per employee is considerably higher in the miners' system than in the general system. In the majority of cases, the right to benefits is vested in the father of the family, with the result that there is a relatively high number of beneficiaries in relation to the number of employees in respect of whom contributions are paid. Thus in 1970, there were 186 dependent children to every 100 employees in the miners' system, whereas there were some 64 in the general system. Moreover, the percentage of mining families drawing the single income allowance is relatively high.

77. However, the ageing of the population covered by the mining system is tending to bring about a reduction in the number of dependent children in the families covered. The financial consequences of this trend, which will become more marked in the years to come, were discernible in 1970, in which year the cost of family benefits fell to 497.76 million francs as against 525.24 million in 1969.

CHAPTER II

BENEFITS

SECTION I - THE LIMITS OF COMPARABILITY

78. The differences already mentioned in the preceding pages between doctrinal concepts and technical structures in the field of welfare and the overlapping of the special social security systems with the general systems impose limitations on comparison between the specific old-age or widows' benefits provided for under the four miners' systems. In the case of sickness and maternity insurance, the differences between health services render comparison extremely complicated.
79. However, from the point of view of benefits, a broad division can be made between the Netherlands and Belgium on one hand and the Federal Republic of Germany and France on the other.

A - THE NETHERLANDS AND BELGIAN SYSTEMS

80. As a result of the integration of the miners' system into the national welfare system (Netherlands) or the merging of all employees' systems into a single system (Belgium), the social security advantages granted to mine-workers in these two countries are to a very large extent identical to those enjoyed by other socio-occupational groups. Certain special benefits have nevertheless been retained.

1 - Old-age and widows' pensions

81. In the Netherlands, the basic provisions for old-age and widows' benefits are the pensions granted under the general laws on old-age insurance (AOW) and widows' and orphans' insurance (AWW). All persons having been subject to income tax in respect of their paid employment within the territory of the realm are entitled to draw these pensions. They have two basic characteristics: they correspond to a social minimum and are distributed uniformly, the only distinctions made being, in the case of old-age insurance, between married and single persons; in widows' insurance, between widows with and without children; and finally, in the case of orphans, a distinction is made according to whether

they have lost one parent or both. The amount of these pensions is determined in relation to the economic prosperity of the country (being geared to the general level of incomes). In addition to these general benefits, specific occupational benefits are also granted.

82. The age at which AOW pensions become payable is 65, and mine employees receive the following other pension benefits:

- a) From the age of 65, a supplementary pension in addition to that granted under the terms of the AOW, the amount of which is established as follows:
 - in the case of manual workers, a percentage of excess earnings during each year of service, being 2% for underground workers and 1.75% for surface workers. The excess earnings in each year are the earnings on which contributions are paid, less a deduction of 1/17th of the benefit provided for married persons under the AOW as at 1 January of the year in question. This deduction, which is called a franchise, represents the amount of earnings which is considered to be adequately covered under the general laws. The amount of the excess pension is not allowed to be less than a minimum, which is 20% of the franchise for the year under consideration.
 - staff enjoy a supplementary retirement pension, up to a ceiling of 70% of the basic pensionable amount, underground staff and surface staff receiving 2% and 1.75% respectively of the basic pensionable amount for each year of service. The basic pensionable amount is the average earnings on which contributions are paid during the last five years, after revalorization of these earnings up to the level on which contributions are effectively payable by staff and deduction of the franchise for the last calendar year. The ceiling of the basic pensionable amount is currently 15,265 guilders.
- b) Between the age of entitlement to the miners' pension and the age of 65, the pension described above and, in addition, a "temporary" pension replacing and anticipating the AOW pension to which they are not yet entitled. The amount of this temporary pension is established as follows: 1/35th and 1/40th of the AOW pension for each

year of service for underground and surface workers respectively; for staff, 1/35th, 1/36th, 1/37th, 1/38th or 1/39th of the AOW pension according to the age between 60 and 64 at which entitlement to the pension commences. In the assessment of temporary pensions, the AOW pension taken into consideration is that which the beneficiary would be entitled to draw at the time at which he is retired. At all events, the AOW pension constitutes a ceiling which cannot be exceeded.

83. The widows' and orphans' pensions allocated under the AMF and BFM systems are determined as percentages of the supplementary old-age pension which the deceased person either has been drawing or would have been entitled to draw. Clearly, the beneficiaries retain their rights under the general law on widows' and orphans' insurance.

84. Finally, at the level of individual undertakings, supplementary old-age and dependants' schemes are in force for the senior management of mining undertakings and their staff whose earnings exceed the maximum income on which contributions are payable under the BFM pension system.

These schemes guarantee a supplementary old-age pension corresponding to a maximum of 50% of earnings in excess of the BFM ceiling on which contributions are paid. Widows receive 70% of their husband's supplementary pension. Orphans' pensions are comparable to those provided by the BFM.

85. In Belgium, since the Royal Decree of 24 October 1967 establishing a general system of retirement and dependants' pensions, mine-workers, their widows and orphans receive the same benefits as other workers, apart from a few special advantages (see No. 86 below). Old-age pensions are calculated on the basis of length of service and earnings (up-valued as appropriate), being, in the case of men, 1/45th of earnings during each year's service (1/40th in the case of women) up to a limit of 75% or 60% of average earnings during the working life (adjusted to the cost of living index) according to whether the beneficiary has a dependent spouse or not. The dependant's pension is equal to the old-age pension which would be allocated to a single person (ratio: 60%) having completed the same number of years of service and received

the same income as the deceased husband. Details are provided later in the report (No. 111) of preferential rules in this connection for mine-workers and their widows.

86. The only remaining specific advantages are the disablement pensions and holiday allowances.
87. The granting of the disablement pension specially provided for mine-workers is conditional on effective termination of work in mining and stipulations relating to unfitness for normal mining work caused by illness. Other conditions concerning length of service may also be applied. The amount of the pension varies according to whether the mine-worker carried out his duties underground or on the surface and whether he is married or not.
88. The holiday allowance granted to mine-workers drawing retirement or disablement pensions is determined in accordance with rules and a scale of rates similar to those applied to other retired workers.

2 - Other benefits

89. No special observations are made in connection with special benefits in Belgium, since in this country, mine-workers receive the same treatment as other employees in the fields of sickness and maternity insurance, family benefits, compensation for occupational illnesses (since the passing of the law of 24 December 1963) and occupational accidents.
90. Regarding the Netherlands, for reasons similar to those expressed above, only sickness insurance and family benefits are dealt with here.

Indeed, although in this country, the laws on sickness insurance (ZW) and medical care insurance (ZFW) are applied generally, mine-workers enjoy additional advantages: cash benefits are payable as from the second day of absence (instead of the third) and sickness benefits are equal to 100% (instead of 80%) of the net daily wage for five days in each week.

Additional family benefits are granted: increases for dependants which are received by the workers and staff of all mining undertakings who are married or heads of families, and additional family allowances for the third and subsequent children over and above the allowances payable pursuant to the

general law on family allowances (AKW).

It should be noted, however, that the workers of the chemicals division of Neederlandse Staatsmijnen NV do not receive their head of family allowances separately but as an integral part of their monthly pay. For these categories of personnel, the additional family allowance has been converted into a guaranteed family allowance, the amount of which falls as the statutory family allowance rises.

B - THE GERMAN AND FRENCH SYSTEMS

91. In both of these countries, the old-age, disablement and dependants' insurance provisions for mine-workers and their families have remained largely independent of the general systems. Sickness insurance also presents certain special features.

1 - Old-age, disablement and dependants' pensions insurance

92. In the Federal Republic of Germany, mine-workers may obtain: benefits under the general system on one hand (occupational disablement pension, pension in the event of general unfitness for work, early old-age pension for unemployed and women insureds, old-age pension, widows' and widowers' pension, orphans' pension) and on the other hand, five types of special benefits (pension for partial unfitness for mine work, miners' pension commencing at the age of 50, miners' old-age pension, compensation allowance for mine-workers, additional pension for long service underground the amount of which varies according to length of service). Increases for dependent children are also granted.

93. The amounts of these benefits are determined on the basis of:

- the number of years of insurance and other periods taken into consideration,
- a general basis for calculation, represented by the average gross income subject to payment of contributions of all the insureds under the three pension insurance schemes: "miners", "manual workers" and "staff", at the end of the first half-year of the three calendar years prior to the year preceding the occurrence of the event carrying entitlement to benefits,

- a percentage calculated on the basis of the ratio between the gross annual income of the insured and the gross annual incomes of all parties insured under the scheme, account being taken of the amounts established for the periods in respect of which no contribution has been paid,
- a weighting coefficient, which varies according to the type of benefits. In the miners' system, the weighting coefficients are more advantageous than those of the general system.

94. In France, the independence of the miners' system in the field of benefits is even more marked. In addition to special advantages, the miners' system provides equivalent benefits to all those of the general system, but the rates and conditions under which they are awarded are very different.

The special advantages for which the system provides in the fields of old-age, disablement and dependants' pensions insurance are as follows:

- special allowances and cumulative compensation,
- dependants' pensions granted irrespective of age qualification,
- relief,
- allowances for dependent children,
- orphans' allowances. The miners' system orphans' allowance should not be confused with the orphans' allowance introduced into the general system under the terms of law No. 70-1218 of 23 December 1970. The former is granted in respect of each child under the age of 16, whether legitimate, recognized or adopted, of members subscribing to the miners' system who die while actively employed (subject to a minimum period of service in the mines) or while drawing a disablement pension or an old-age pension corresponding to at least 15 years of service in the mines. The latter is a form of family benefits allocated to any child whose father or mother has died or otherwise disappeared. The granting of this latter benefit is subject to a means test ceiling the amount of which is determined by decree.
- heating and housing allowances.

The equivalent benefits to those of the general system are: disablement pensions, retirement pensions granted for a minimum of 15 years' service, other old-age pensions.

95. The conditions for the allocation of these benefits, and the methods by which they are assessed and geared to the cost of living are very different from those applied in the general social security system. In particular, it will be noted that the miners' system differs from the general system in that the amount of these benefits is not determined as a percentage of a reference income (average up-valued income up to the ceiling of earnings on which contributions are payable actually earned by the beneficiary over the last ten years), but exclusively on the basis of the length of service and the nature of work (underground or on the surface). In order to make allowance for the rising cost of living, miners' pensions are geared to miners' earnings.
96. In addition to these benefits, mine-workers are also entitled to benefits available to those insured under the general system, such as allowances for dependent spouses and children, and "coordination" pensions for workers who, either successively or alternately, have worked in occupations covered by the special miners' social security system and one or more other social security systems, whether general or special.

2 - Sickness and maternity insurance

97. The German miners' sickness and maternity insurance system only differs from the general system in the field of medical care benefits. For other benefits, the general provisions are applicable. The same is not true of France, where the special aspects of the miners' system are more marked.
98. In the Federal Republic of Germany and the French miners' system, no limitation is imposed on the length of time during which sickness insurance benefits in kind can be granted. The subscriber's contribution to the cost of medicines (prescription charges) is 20% in the Federal Republic of Germany (with a ceiling of 2.5 DM per prescription) and in the French miners' system, it is only 0.60 francs per prescription. In the former country, pensioners are exempted from

payment of prescription charges.

99. Benefits in specie (daily compensation), on the other hand, are only granted for limited periods.

The German sickness allowances are granted for up to 78 weeks in any three-year period.

In France, in both the miners' and general social security systems, the equivalent compensation can only be granted for a maximum of 360 working days in any period of three consecutive years, irrespective of whether one or more illnesses are involved. In the case of long, costly illnesses, the daily benefit may be paid during a period of three consecutive years for each illness. In the event of an interruption following a return to work, a new three-year period commences as soon as the period of resumption of work has lasted at least one year.

100. In both countries, maternity benefits are, in principle, granted over a 14-week period. Under German legislation, this period is raised to 18 weeks in cases of premature births, twins and multiple births.

101. In the Federal Republic of Germany, the amount of sickness benefits depends on the duration of the illness, and the family circumstances and earned income of the beneficiary.

This is not the case in France, where the rates of daily sickness and maternity benefits are established as fixed amounts for all categories of subscribers. However, the regulations of the Miners' Relief Societies may provide for higher rates subject to the approval of the Board of Directors of the Caisse autonome nationale. Exceptional increases may also be granted in order to provide for special circumstances or exceptional family responsibilities.

102. In order to qualify for entitlement to benefits in kind or in specie in France, it is sufficient for a person to have been a subscriber to the miners' social security system on the date of receipt of the medical care in respect of which reimbursement is claimed. Nevertheless, after the sixth month of unfitness for work, the benefits are discontinued unless the person concerned has been registered at least 12 months as at the first day of the month preceding the date on which he stops work and can demonstrate that he has worked

for at least 800 hours during the 12 months preceding that date, including 200 hours during the first three months. In order to qualify for maternity benefits, it is sufficient for the person to be a subscriber to the miners' social security system on the date on which pregnancy is confirmed by a doctor.

103. In both countries, health services have been set up with doctors engaged under contract who, although paid directly by the miners' funds, retain their professional independence and freedom of decision as to treatment.

SECTION II - POINTS IN COMMON

104. Alongside the differences between miners' social security systems in the various countries outlined above, they also have significant points in common corresponding to their identical social objectives.

A - MINERS' SOCIAL SECURITY SYSTEMS ARE PRIVILEGED IN RELATION TO THE COMMON LAW SYSTEMS

105. The special social security systems, initially designed to increase the attractiveness of an occupation which, for many years, was indispensable to national economies, and to promote recruitment and stability of personnel in mining undertakings, which remain labour-intensive despite mechanization, had of necessity to offer better advantages to mineworkers and their families than the social guarantees normally offered to employed persons as a whole.
106. It will be remembered that, historically, the special systems antedate the general systems.
107. However, although social security benefits have become universally available, mineworkers still receive privileged treatment, not only in the lower age qualification for pensions, but also in the awarding of retirement pensions on more generous terms and the availability of additional benefits.

The two latter categories of advantages are discussed under this heading (A).

108. As has already been mentioned (cf. Nos. 92-93) in the Federal Republic of Germany, the common law pensions received by mine-workers (namely, occupational disablement pensions, pensions in the event of general unfitness for work, early old-age pensions for unemployed and women insureds, old-age pensions, widows' and widowers' pensions, orphans' pensions) are higher in the mining system than in the general system because of the application of higher weighting coefficients. Moreover, additional benefits have been introduced.
109. The same is true of France, where there are special pension advantages (cf. No. 94) and miners' retirement pensions remain generally higher than those granted under the general system.
110. Similar situations exist in Belgium and the Netherlands.
111. As has been stated above, in Belgium, in general, pension rights are acquired at the rate of 1/45th (1/40th in the case of women) of earnings on which retirement pensions are assessed in each year of active employment. For mine-workers with 20 years' service in the mining undertakings, pension rights are established at the rate of 1/30th for each calendar year of employment in this capacity. In order to obtain a full pension, therefore, the mine-worker must work for 30 years, as compared with the 45 years under the general system.

Preferential rules concerning qualification for pensions have been retained. Thus, in addition to periods of unemployment with compensation which count towards the retirement pension, periods of paid employment outside mining can also be taken into account when the worker has been employed in the mines for at least 10 years and is obliged to leave them by pit closures. Moreover, the earnings serving as a basis for the assessment of pensions during the years preceding the merging of the retirement pensions systems (1968) was set at a higher level for underground mine-workers than for other employed workers.

To complete this list of special advantages, there are the widows' pensions which are granted without condition as to age when the husband has been employed as an underground mine-worker for at least 20 years, and finally, free supplies of coal.

112. As to the Netherlands, suffice it to mention the old-age pensions which, in the case of mine-workers, are paid prior to or in addition to the AOW pensions, and the widows' and orphans' pensions which are granted in addition to those provided under the terms of the general law on widows' and orphans' insurance.
113. However, it must be admitted that, apart from the early entitlement to pensions, the difference between the advantages available to mine-workers and those granted to employed persons as a whole is tending to diminish. This is attributable partly to the development and improvement of the general social security systems and partly to the run-down of the mining industry.

A similar phenomenon is occurring in the Federal Republic of Germany and France, where records show a continued increase in the number of "coordination" retirement pensions granted to former workers who have been employed, either successively or alternately, in mining undertakings and other undertakings covered by the general social security system.

B - UNDERGROUND WORKERS RECEIVE SPECIAL ADVANTAGES

114. In all the countries, years of service underground carry entitlement to additional advantages. In addition to early entitlement to the pension (cf. Section III below), there are also increased retirement pensions and benefits granted on special conditions.
115. Pension increases are provided:
- In the Federal Republic of Germany, by pension supplements the amount of which varies according to the number of years of service underground in excess of 5 years.
 - In France, by increases of disablement and proportional or normal old-age pensions, at the rate of 0.15% for each

three-month period of service underground in the French mines. Beneficiaries of retirement pensions who have less than the minimum of 60 three-month periods of service with the mines, but who have at least 40, receive a retirement pension increase equal to that which would be allocated to a worker in receipt of a proportional pension for 60 three-month periods of service who has completed the same number of years of work underground.

- In the Netherlands, by the application of higher percentages to the earnings taken into consideration in the assessment of temporary and excess old-age pensions (and consequently, widows' and orphans' pensions also) for each year of service underground (cf. No. 82 above). It is worth noting that, in this country, a loyalty bonus corresponding to 1% of earnings for each year of service underground after the 10th year is paid. This bonus is paid to face workers with 24 years of service underground who have reached the age of 41, or with 20 years of service underground who have reached the age of 45, when it becomes necessary for them to be employed on less well paid work.

116. There are no similar measures in Belgium, but mine-workers and their widows receive disablement pensions and widows' pensions respectively on more generous terms (cf. Nos. 87, 111 above). In particular, entitlement to the widows' pension is automatic irrespective of age when the deceased husband has been employed as an underground mine-worker for at least 20 years.

C - SPECIAL BENEFITS INTRODUCED AS INCENTIVES TO WORKERS TO LEAVE THE MINES

117. Independently of, or as a part of the measures designed to relieve the mining labour market which are discussed later in this report, some of the special systems provide for specific incentives to workers to leave their employment in the mines.
118. The following are some examples of such provisions: the old-age pensions granted without any age qualification to certain categories of workers in France and Belgium. The same purpose is served by the benefits awarded in the Netherlands to personnel laid off from the mining industry

(cf. Nos. 169 and 170 below) and the compensatory allowances and early retirement pensions introduced in the Federal Republic of Germany (cf. Nos. 92, 169 and 174).

SECTION III - THE RETIREMENT AGE AND THE LEVEL OF PENSIONS

A - STATUTORY QUALIFYING AGES FOR THE OLD-AGE PENSION

119. The qualifying ages for the various categories of old-age pensions in the four countries are shown in a table at the end of the report (Annex I).

120. In Belgium and France, under certain circumstances, old-age pensions can be granted irrespective of age. The beneficiaries of these pensions are:

- In Belgium, workers with a minimum of 30 years of regular service underground in the coalmines (185 days or 1,480 hours per calendar year),

- In France, workers with a minimum of 60 three-month periods of service in the mines who, being actively employed on the date of their application, are confirmed in accordance with the conditions laid down by the laws on the compensation of occupational illnesses as being at least 30% disabled as a result of an occupational silicosis contracted in the mines, compensation for which is made through the miners' social security system.

Moreover, in the light of the recession in the mining industry, several measures have been introduced in France since 1960 in order to reduce the retirement age on a selective basis. The application of these measures varies according to the type of undertaking and takes account of the type of job held, including work reserved for disabled personnel (cf. Chapter IV, Section II, below).

121. France is without question the country where the qualifying ages for pensions are the lowest. The miners' retirement pension may be granted at the age of 50 in the case of workers with a total of 120 three-month periods of service, 80 of them underground in the French mines. Furthermore, all the other categories of mining personnel are entitled to a pension under the miners' system on reaching the age of 55, irrespective of their length of service.

122. By contrast, certain types of miners' retirement pensions in the Federal Republic of Germany and the Netherlands are not awarded until the age of 65.

In the Federal Republic of Germany, 65 is the qualifying age for workers with less than 25 years' affiliation to the miners' system who do not fulfil the requirements for compensatory allowances or the early retirement pensions provided for unemployed workers and female insureds. In the Netherlands, the retirement pension for miners is not granted until the age of 65 in the case of workers with less than 10 years' affiliation and staff members with less than 10 years' service underground. Nevertheless, workers with many years of service underground in these two countries are able to draw the retirement pension at the age of 55 or 60.

123. In Belgium, the qualifying age for the pension is currently 55 for underground workers and other workers placed in the same category, and 60 for surface workers.

B - THE LEVEL OF PENSIONS

124. Comparisons between levels of pensions, which are often an contentious issue at the level of internal legislation, lose much of their significance in an international context. Apart from the monetary value of pensions and their purchasing power, account must be taken of all the differences as regards qualifying age, social objectives and the components of benefits referred to above. Indeed, it would be vain to compare the pension granted in France at the age of 55 - or irrespective of age - with that which the German or Dutch miner with the same length of service in mining does not receive until the age of 65; moreover, in the Netherlands, benefits under the general insurance system are granted in addition to the miners' pension. For these various reasons, comparisons in this field should be approached with the greatest caution.

125. The difficulties encountered in a comprehensive study of the level of pensions are further complicated by the following factors:

- In Belgium, the comments on miners' pensions relate exclusively to the system applicable to workers and account has to be taken of the fact that amounts of pensions vary according to length of service and type of work (surface or underground) and also according to whether the beneficiary is a single or married person
- In France, in addition to the basic miners' pension, there are pensions provided under supplementary systems and supplementary family allowances.
- In the Netherlands, it is necessary to consider the pensions awarded to workers, staff and senior management separately, since these three occupational categories belong to different systems. Moreover, in many cases, miners' pensions are complementary to benefits granted under the general laws on old-age insurance and widows' and orphans' insurance.

126. Subject to the limitations imposed by these factors, it may be stated that the average amount of miners' retirement pensions in the Federal Republic of Germany represents a higher percentage of miners' average earnings than in France.

In the Federal Republic of Germany, the old-age pension for 30 years' service in the mines on the surface (608.60 DM a month) corresponded, in 1970, to 57.74% of the average earnings of surface workers (1,054 DM a month); the pension awarded for 30 years of service including 26 years underground (813.60 DM a month) was 61.87% of the average earnings of underground workers (1,315 DM a month) and 56.93% of the earnings of face workers (1,429 DM a month) (1).

In France, also in 1970, the equivalent pensions represented only 50% of the average annual earnings of a mine-worker (surface and underground), including the supplementary pension, but excluding family benefits.

127. However, the rate of increase of average amounts of pensions over the last 10 years appears to be substantially faster in France than in the Federal Republic of Germany.

(1) Figures supplied by the Bundesknappschaft.

Since 1 January 1960 (the base year adopted), the index of old-age benefits, which are related to the general level of earnings in the mines, had risen in France from 100 to 225 by 1 January 1971.

During the same period, from 1960 to the end of 1970, in the Federal Republic of Germany, the index rose to:

- 187 for old-age pensions for 30 years' service on the surface,
- 188 for old-age pensions for 30 years' service, 26 of them underground,
- 193 for the average amount of all old-age pensions granted at the age of 60,
- 195 for the average amount of all miners' old-age pensions granted at the age of 65.

128. In the Netherlands, the cumulative amount of the AOW pension for married persons and the AMF pension granted to workers represented 59% of the average earnings of underground workers in 1969. On the other hand, the indices of AMF and BFM pensions only rose to 126 and 148 between 1960 and 1969.

Consequently, the maintenance of the standard of living of former mine-workers has been borne largely by the increases in the AOW pension, which have been higher than the rise in the cost of living. Thus, the AOW index had risen by stages to 313 by 1 January 1967 as against 100 on 1 January 1957, whereas the cost of living index only rose from 100 to 151 between 1954 and 1 January 1967, by which date the salaries and wages index stood at 262.

129. In Belgium, the ratio between the retirement pension and earnings is less favourable. In 1967, the pension for 30 years' service including 26 years underground was 47.24% and 34.8% of the average gross annual earnings of a worker for married and single persons respectively.

It will be noted that, in the same year, the amount of the equivalent French miners' retirement pension (30 years of service in the mines including 26 underground) was 41% of the average annual earnings of underground mine-workers, excluding family benefits and the complementary pension. As has

been stated above, the latter has, since 1967, represented approximately 10% of average earnings.

PART TWO

THE STRUCTURAL CRISIS IN THE MINING INDUSTRY AND
THE DEVELOPMENT OF OCCUPATIONAL SOCIAL SECURITY SYSTEMS

GENERAL

130. The financial equilibrium and development of any social security system are conditioned by various circumstances, the nature of which determines whether their effects are favourable or detrimental. Some influence the general financing of the system; others have more marked repercussions on the technical functioning of certain branches of insurance.
131. Like all occupational systems, the special social security systems for miners are "closed" systems. Their operations are geared to the internal requirements of socio-occupational groups. These factors, together with the limited field of application as regards the persons covered, leave little scope for flexibility.
132. Three of these systems are based on the notion of total distribution of resources, which, in fact, are severely limited, and sometimes the only available funds are those being produced by current revenue. Consequently, the ratio between the number of subscribers and the number of persons drawing benefits is a factor of particular importance in that it is an area which offers little scope for action.
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x x
133. Whether it is caused by the rationalization of undertakings or the reduction of production, the run-down of the labour force must inevitably have repercussions on all branches of miners' social security insurance, the financing of which is based on contributions from earnings.
134. Thus, the demographic ratio influences the financing of systems, and when there is a reduction in the number of subscribers accompanied by a corresponding increase in the number of persons claiming benefits, the financial situation

is inevitably thrown out of balance. However, the effects of this can be mitigated in the short term by other factors: higher level of earnings, increase of the rate of social contributions, raising of the ceiling of earnings subject to contributions, etc.

135. In sickness and maternity insurance, other factors - of a demographic, economic, sociological and psychological nature - intervene: ageing of the populations held covered, technical development and higher costs of medical care, increasingly widespread recourse to medical facilities, hospital legislation, rising prices, higher life expectancy, etc.
136. In the other branches of social security, population structures play an influential role, but their effects are less easily identifiable, since they are sometimes accentuated or counterbalanced by other factors producing inevitable effects.
137. For example, in the insurance of occupational accidents and illnesses, substantial increases in expenditure can be caused by late claims or increases in the rates of disablement compensation. Conversely, the loss of income caused by the run-down of personnel will eventually be counterbalanced by a lower frequency of claims as mining undertakings run down and finally terminate their operations.
138. In the field of family benefits, one finds that in the mining industry, there is a higher number of dependent children to each person paying contributions and that miners' wives do not generally take employment in the industry; these factors are causes of financial disequilibrium which are peculiar to the miners' special system. However, in due course, the ageing of the populations held covered will bring about a reduction of costs and thus mitigate the effects of the recession of the mining industry on resources. As the mining population ages, there will be an inevitable reduction in the number of children and other dependants and this in turn will bring about a decrease in family benefits costs.
139. It should also be noted that, as far as these branches of insurance are concerned, mine-workers are in most cases included in the general welfare systems. France is the only country where occupational accident and sickness insurance and

family benefits are administered independently by the special miners' social security system.

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140. In the light of these general observations, the second part of this report will be limited to an examination of the consequences of the run-down of personnel on pensions insurance (Chapter IV) and sickness and maternity insurance (Chapter V), preceded by an analysis of the economic and demographic factors which have a bearing on the development of the social security systems (Chapter III).

CHAPTER III

ECONOMIC AND DEMOGRAPHIC FACTORS

SECTION I - THE STRUCTURAL CRISIS IN THE MINING INDUSTRY (1)

141. It is common knowledge that, whereas the growing energy requirements of our modern society continue to cause demand to rise constantly, coal production in the countries of the Community is in decline. This decline is attributable, at least in part, to the depth at which coal deposits lie and the difficulties which, despite mechanization, are now encountered in extraction. Many of the mines are old, and here conditions become increasingly difficult as the working of the deposits progresses. Labour is a substantial item in the overall cost price.
142. This situation causes increased production costs which, despite technical progress, in turn give rise to higher costs per ton and, in many cases (particularly in the Belgian and French mines), a very low level of profitability.
143. In Western Europe, therefore, coal as a source of energy is available in limited quantities only, the economic cost of which is rising constantly. The structural necessity for the Community to have recourse to imported coal has thus been underlined by the increased costs of domestic production over the last ten years. The years to come will provide further justification for adopting this course.
144. Competition between the various sources of energy is reducing the scope for increasing selling prices, and an endeavour to ensure balanced production has been made by progressively limiting activities to the mining of pits where it is possible for production to remain competitive for a number of years. The improved productivity of existing installations is a further factor contributing to the laying-off of personnel. Underground, productivity per shift is

(1) Cf. Commission of the European Communities: "Etude sur la question de l'approvisionnement en charbon et de la production houillère dans la Communauté", 3541/1/XXVII/70.

improving constantly. In the German mining industry, it more than doubled between 1958 and 1968. In the other Community countries there has also been a substantial improvement, although on a lesser scale.

145. During the years to come, production will continue to decline, but at different rates in the various Member States. Whereas a complete stoppage of all coal production is scheduled for 1975 in the Netherlands, the official programmes of the Federal Republic of Germany provide for a reduction of not more than 7% during the period 1968-1975. On the other hand, in Belgium and France, the foreseeable reduction of production during the same period should be in the region of 40%, and for the period 1971-1975 alone, the figure is likely to be +18% in Belgium and +21% in France.

146. The inevitable consequence of the decline of the mining industry and the improvement of productivity is a reduction of the labour force.

147. In fact, the reduction of the number of persons employed in the mining industry is to a very large extent conditioned by social considerations relating to the welfare of workers for whom the industry can no longer provide work. The lack of mobility of mine-workers is an established fact and transfers of labour within the coal industry of the Community are therefore impossible. Consequently, the reduction of the number of persons employed in the industry as it declines must be achieved as far as possible through the opportunities offered by natural wastage and by the creation of alternative employment.

148. At all events, the main factors determining the trend of the population structure of the national miners' social security systems are the contracting number of mine-workers and the ageing of the populations held covered.

SECTION II - THE CHANGING STRUCTURE OF THE POPULATIONS COVERED BY THE MINERS' SOCIAL SECURITY SYSTEMS

A - ACTIVELY EMPLOYED WORKERS

149. Analysis of the changing population structure of members subscribing to the four national miners' social security systems leads to the following conclusions:

- The vast majority of persons covered by these

occupational systems are colliery workers, but the proportion for which they account in the Federal Republic of Germany and France is decreasing;

- Over the last 20 years, the numbers of subscribers have diminished substantially;

- The average age of mine-workers has risen considerably.

§ 1 - Colliery workers as a proportion of total membership

150. In Belgium, the proportion is extremely high and the miners' social security system is virtually exclusively for the benefit of colliery workers. In 1955, they accounted for 149,680 of the 152,596 persons registered with the "Fonds national de retraites des ouvriers mineurs belges" (National Pension Fund for Belgian Mine-workers). The corresponding figures for 1960 are 102,412 and 103,390, and those for 1969 are 42,572 and 43,075.
151. The situation in the Netherlands is similar, although the employees of certain chemicals industries are included in the miners' pension system. At the end of 1970, there were 24,600 subscribers to the mine-workers' general fund (AMF), of whom 11,400 were colliery workers.
152. In the Federal Republic of Germany, coal and lignite mine-workers accounted for 86.52% of all subscribers (excluding the Saarland), but by 1969, the equivalent figure for the whole of Federal Germany was only 80.91%.
153. The situation is much the same in France, where colliery workers accounted for 82.26% of all subscribers to the miners' system in 1955, and only 78.50% by the end of 1970. Whereas these percentages reflect the contraction of the "coal" group among the total number of subscribers, they also mean that the reduction in the number of employees in the collieries is having serious repercussions on population structures which are not being counterbalanced by any increase in the number of employees in other types of undertaking included in the miners' social security systems.

§ 2 - Reduction of the number of subscribers

154. In all four countries, there are general, substantial reductions in the numbers of subscribers. However, the extent and causes of these reductions differ from one country to another.
155. In the Netherlands, the number of persons covered by the AMF, which was in the region of 28,000 on the eve of the Second World War, rose progressively until 1958, when the total was 55,267. Since then, there has been a steady decline, to 45,890 in 1965 and 24,600 in 1970. Similarly, the number of BFM subscribers rose from 5,644 as at 1 January 1954 to 8,187 as at 31 December 1962, only to fall to 6,400 in 1970. All these figures include workers in the chemicals industry. The reduction of the number of subscribers during recent years is largely due to the decline of the coal industry, which, in all probability, will have been phased out completely by 1975.
156. The contraction of the labour force in the mining industry in Belgium and France is attributable to similar causes: the improvement of productivity and the decline of the industry. However, the process has been a more dramatic one in Belgium than in France.
157. Indeed, the number of workers registered with the "Fonds national de retraites des ouvriers mineurs belges" fell from 152,596 to 43,075 between 1955 and 1969. By the end of 1970, the figure had fallen to 38,293 (of whom 37,989 were employed in the coalmines), only 25% of the number registered as at 31 December 1957 (151,898). According to the official rationalization programme, during the period 1971-1975, production is to be reduced by approximately 18%, whereas the number of employees in the Belgian mining industry is due to fall by some 40%, so that by 1975, the total labour force should be some 22,700.
158. In France, the number of mine-workers, which had been approximately 474,000 just after the Second World War, had fallen to 405,000 by 1950, 285,000 by 1960 and 164,648 by the end of 1970. By 1975, the number of persons covered by the French miners' system will have fallen to some 106,000. The extent of this decline will be determined largely by the

contraction of the coalmining labour force which, from 313,595 employees (personnel: underground, surface, administrative staff and management) on 31 December 1949, had fallen to 216,793 by 31 December 1960 and 119,238 by 31 December 1970. According to the official forecasts, the coalmines will only be employing some 66,000 workers in 1975.

159. In the Federal Republic of Germany, the contraction of the labour force has been caused to a very large extent by rationalization of mining undertakings (involving closures of non-profitable pits), mechanization and increased productivity. Admittedly, production itself has diminished, but to a lesser extent than in the other countries of the Community, and the rate of reduction should not exceed 7% between now and 1975.

Nevertheless, the labour force, which was 601,000 in 1950 (520,000 of them in the coal and lignite mines) and 702,000 in 1957 (600,000 in the coal and lignite mines) (1), had fallen to 501,000 by 1965 and 351,000 by 1970. By 1975, the total number of subscribers to the Bundesknappschaft pension system will probably be 317,400. Thus, the total number of subscribers fell by 45.07% between 1960 and 1970 (from 639,000 to 351,000); it will probably fall by 50.39% between 1960 and 1975 (from 639,000 to 317,000), 9.68% of this reduction being during the period 1970-1975 (from 351,000 to 317,000).

This trend in the size of the labour force is clearly largely due to the reduction in the number of workers in the coalmines as a consequence of the structural changes of the coal industry. The coalmines will account for approximately 90% of the reduction in the number of subscribers during the period 1970-1975.

§ 3 - Ageing

160. Comparison of the age pyramids (Annex III) shows that, in the four countries, the labour force is ageing considerably. Between 1955 and 1969, there was a decline in the number of workers under the age of 30, mirrored by a very clear rise in the proportion of workers aged between 40 and 50.

(1) Prior to 1960, these figures did not include the mines in the Saarland.

In 1968, workers under the age of 30 accounted for 18.5% of the labour force in the Federal Republic of Germany, 14.37% in Belgium, 15.78% in France and 21.14% in the Netherlands. The percentage of workers under the age of 20 in each of these countries was 5.8%, 1.39%, 2.62% and 3.4% respectively. By contrast, workers aged between 40 and 50 accounted for 33.4%, 33.7%, 41.21% and 32.4%. In the Federal Republic of Germany, 21.1% of the workers were over the age of 50 in 1955, and 18% in 1968; the proportion in France was only 14.78% in 1955 and 12.80% in 1968.

161. Although the ageing of the actively employed labour force is more marked in France than in the Federal Republic of Germany, the process is still more pronounced in Belgium, where the breakdown of age groups in 1969 was as follows: 11.44% under 30, 35.58% between 30 and 40, 36.94% between 40 and 50 and 16.04% over 50.
162. These differences in the age distributions of the workers in the three countries are attributable to the more rapid rundown of coal production in Belgium and France, which has caused recruiting to be halted and retirements to be accelerated. The fact that there are now fewer mine-workers over the age of 50 in France than in the three other countries can be attributed to the better early retirement facilities granted under the French system.

B - PENSIONERS

163. During the last two decades, there has been a substantial increase in the number of beneficiaries as against the number of contributors in all four countries, although the increase has not been of the same order everywhere. It has been higher in the Netherlands (158.6% between 1950 and 1969 in the AMF system) than in France (61.32% between 1950 and 1970). In the Federal Republic of Germany, the number of pensioners only rose by 6.71% between 1950 and 1959 and by 8.97% between 1960 and 1970 (the figures for the first period do not include the workers in the Saar). In the case of Belgium, the total number of persons drawing benefits rose by 33.77% between 1950 and 1968, after which year all pension systems for employed persons were merged.

However, behind these percentages, there is a very varied picture as regards the proportions of the different types of benefit. The overall percentages therefore give an incomplete impression of the true situation. Significant details on this subject are contained in Annex IV, which shows the variations of the numbers of beneficiaries in the four countries, giving a breakdown of benefits between: old-age pensions, widows' pensions, orphans' pensions and disablement pensions.

164. In Belgium, the highest rate of increase has been in disablement pensions, the number of which has risen from 17,391 in 1950 to 48,183 in 1967 and 44,805 in 1970; by the end of 1971, the total was 44,100. By contrast, the number of old-age pensions reached a peak of 46,274 in 1951, then fell steadily to 35,403 at the end of 1967, and subsequently rose to 37,400 by the end of 1970. During the period 1950-1970 as a whole, there was a reduction of 19.17%.

It appears probable that the fall in the number of old-age pensioners since 1951 will continue until 1973 (30,000 pensioners). This is the consequence of reduced recruitment during the 1930-1936 economic crisis and the effects of the 1939-1944 war. After 1974, however, the number of pensioners should begin to rise again, reflecting a recruiting drive immediately after the war. The estimated figure for 1975 is 37,000, and it could be as high as 45,000 in 1979.

The number of widows' pensions rose constantly (+37.73%) during the period under consideration, but it has tended to stabilize during the period 1968-1971 at around 47,000, and is beginning to fall slightly, the projected figures for 1975 and 1980 being approximately 46,000 and 45,000 respectively.

To these must be added the disablement pensions, the number of which quadrupled between 1945 and 1967 (from 12,862 to 48,183), but have declined steadily since 1968: 44,800 at the end of 1970, 44,100 at the end of 1971 and probably 43,000 in 1975 and 40,000 in 1980.

165. Apart from orphans' allowances in the Federal Republic of Germany and France (because of the ageing of the actively employed population), the numbers of beneficiaries of the

various categories of old-age and widows' pensions rose in the other three countries (Federal Republic of Germany, France, Netherlands) between 1950 and 1970.

There is every indication that they will continue to rise during the coming years. By 1975, there will probably be some 410,000 in France (as against 106,000 subscribers), 783,000 in the Federal Republic of Germany (as against 317,000 subscribers). By this time, in the Netherlands, the miners' special social security systems will have a membership entirely made up of retired persons, with the exception of workers in the chemicals industry, since all mining activity will have ceased.

166. It will be noted that, in France, there has been a very high increase (+ 1,143.5%) in the number of coordination pensions awarded to workers who, having been unable to complete their careers in mining, have been obliged to work in undertakings covered by other social security systems.
167. The number of recipients of allowances and pensions is highest in relation to the number of subscribers in Belgium. In this country, the ratio between recipients of benefits and subscribers was higher than 231% in 1967 (204.99% if one excludes disablement pensions, allowances for children and orphans, and redeployment compensation) as against 190.67% in the Federal Republic of Germany, 178% in France and 95.22% in the Netherlands (AMF system). In the latter three countries, the ratio has deteriorated further during recent years and, in 1969, it was 128.4% in the Netherlands and, in 1970, 212.1% in the Federal Republic of Germany and 238% in France.
168. The rundown of coal production (which, in France, Belgium and the Netherlands in particular, has caused stoppages of recruitment and accelerated retirement) does not suffice to explain the increase, both in absolute figures and in relation to the number of subscribers, of the number of pensioners. A further contributory factor is the historically top-heavy structure of the miners' social security systems. In the Federal Republic of Germany, political factors also enter into play, the number of pensioners being swelled by the insureds of German nationality who have either gone into exile or been expelled, whose pension rights in respect of service in regions which are now situated outside federal

territory have been recognized by the Bundesknappschaft.

169. The pension liabilities of the four national miners' social security systems have been built up over very long periods and, even if the population structures had remained favourable, their resources would now be fully stretched. In addition to the effects of the recession, they are suffering the consequences of the heavy recruiting carried out in the past, the effects of which will still be felt during the years to come. Further factors are the improvements of conditions of insurance, such as relaxation of regulations regarding entitlement to benefits and reduction of age qualifications for retirement pensions, and the increase of life expectancy.

SECTION III - THE CONTRIBUTION OF MINERS' SOCIAL SECURITY SYSTEMS TO NATIONAL REDEPLOYMENT POLICIES

170. It has been necessary to adopt measures, at employment level, in order to make provision for the occupational redeployment of mine-workers. In Belgium, France and the Netherlands, such measures have been greatly instrumental in conditioning the running-down and closure of mines.
171. This comprehensive report confines itself to consideration of the contributions made by the miners' social security systems to national redeployment policies.
172. In this field, there is a degree of similarity of thinking behind the action adopted by the various miners' national social security systems, which has all been designed to meet two main objectives: to preserve acquired or partially acquired pension rights, and to maintain the standard of living of workers obliged to leave the mines.

A - PRESERVATION OF ACQUIRED OR PARTIALLY ACQUIRED RIGHTS

173. The primary objective was to mitigate the consequences on the pension rights of workers obliged to leave the mines by the recession in the industry.
174. To this purpose, measures were introduced in the four countries to allow the continuation of insurance during periods of involuntary unemployment or during employment in undertakings which do not, or no longer have, any connection with the miners' social security system.

§ 1 - Unemployment

175. In all four countries, periods of involuntary unemployment, particularly those caused by economic crises, may be taken into consideration in the assessment of retirement pensions, either by the terms of the law (Federal Republic of Germany, Belgium, Netherlands), or under the terms of decisions of principle adopted by the national pensions authority with the agreement of the competent ministries (France). In the Netherlands, if workers are laid off from the mining industry within a minimum period of five years from the date on which they would become entitled to retirement pensions, their pension rights are maintained, the State taking over the employer's contributions and part of those payable by the workers.

§ 2 - Gainful employment outside the mines

176. In the Federal Republic of Germany, the entitlement to benefits under the miners' pension insurance system is kept open for persons employed in certain undertakings separated from the mines as a result of nationalization.

The same applies to mine-workers in Belgium who, after the mines have been closed down, continue to work in, or are transferred to coking plants previously attached to the coal-mines.

Similar measures have been adopted in the Netherlands, designed to maintain the benefits conferred by the miners' pensions system for workers who, as a result of the rundown of coal production, are obliged to follow occupational retraining courses or are allocated to certain types of work provided for under the law on social measures to promote the employment of handicapped persons (WSW).

177. In France, there are even more possible methods of maintaining affiliation to the miners' system. By the terms of bylaws (modified Articles 6 and 8 of the constitutional decree of 27 November 1946), workers with a minimum of three years' affiliation to the miners' social security system can, on demand, continue to benefit under this system if they are employed in certain types of industrial concern which are to some degree linked with the mining undertakings. In principle,

affiliation can be retained for benefits in respect of old-age, disablement and death (surviving dependants' pensions), but, in the case of certain undertakings nominated by ministerial order, affiliation can be retained for benefits in respect of sickness and maternity insurance and death grants.

By the terms of a ministerial order issued on 2 August 1971, colliery workers with a minimum of 10 years' affiliation who accept alternative employment in certain types of undertaking are allowed the option of maintaining their rights under the miners' system in order to complete the necessary 15 years conferring entitlement to a proportional retirement pension.

These regulations are supplemented as necessary by individual decisions taken by the Board of Directors of the Caisse autonome nationale de la sécurité sociale dans les mines in response to applications from interested parties, allowing temporary maintenance of affiliation for old-age and disablement benefits and widows' pensions to workers who, for reasons beyond their control, are obliged to accept employment in undertakings nominated in ministerial orders which do not come under the miners' social security system.

B - MAINTENANCE OF THE STANDARD OF LIVING

178. In addition to the aid granted by the individual States and the EEC in order to facilitate redeployment, the national miners' social security systems are actively involved in maintaining the standard of living of mine-workers. The basis of their contribution is the granting of miners' retirement pensions at an early age, or irrespective of age, which the workers are allowed to add to their earnings if they are employed in other sectors of industry.
179. A first example of this type of provision is the granting of miners' retirement pensions, subject to certain conditions of length of service on the surface and underground, which are awarded from the age of 50 in France, and from 55 in Belgium and the Netherlands.
180. The same purpose is served by the compensatory allowances granted:

- In the Federal Republic of Germany, as from the age of 55, to mine-workers obliged to leave the mines who have 300 months' affiliation to the miners' pension insurance scheme, during some of which time they have been engaged in certain types of underground work;

- In Belgium, in order to cover the difference between the retirement or disablement pension and the unemployment benefit for workers who, when they are dismissed, have a record of service of at least 25 years underground or 30 years on the surface, or for those who, after five years' service, fulfil the medical conditions required for the granting of the disablement pension.

181. Moreover, it will be remembered that, in Belgium and France, old-age pensions can be granted irrespective of age, subject to the following conditions only: either 30 years' service underground, including 185 days or 1,480 hours per calendar year (Belgium), or, in France, only 60 three-month periods of service when the worker can provide evidence of a permanent 30% disablement caused by an occupational silicosis contracted in the mines for which compensation is payable under the miners' special social security system.

182. A list of the provisions adopted in the various countries would be incomplete if it did not include the early retirement pensions in France payable, subject to conditions laid down in ministerial orders or agreements concluded between the employers and the Caisse autonome nationale de la sécurité sociale dans les mines, to workers having between 15 and 29 years' service counting towards the miners' retirement pension, including four underground, or a minimum of 30 years' mining service in certain undertakings or groups of undertakings and certain types of employment, or who are in receipt of compensation in respect of occupational accidents or illnesses. Until the date on which the pension becomes payable under the normal regulations, the Caisse autonome nationale de la sécurité sociale dans les mines receives reimbursement for amounts paid in pensions from either the coalmines concerned or the Association de la sidérurgie et des mines de fer de Lorraine, as appropriate. They do however influence sickness insurance costs, since the

contribution payable in this respect is far from sufficient to cover expenses.

CHAPTER IV

THE PROSPECTS FOR FUTURE TRENDS IN PENSIONS INSURANCE

183. The effects of the reduction of the number of persons subscribing to the pensions systems on their financing derive from two opposing series of factors:
- factors involving increases of resources or limitation of expenditure: increase in the level of earnings and the ceiling on which contributions are payable; reduction, as a result of early retirement schemes, of the lengths of service in the mines on which the assessment of pensions is based; increase in the number of pensions paid on uncompleted terms of service in the mines ...
 - factors leading to increased expenditure: lower number of actively employed, increase of the annual costs of benefits, higher number of pensioners ...
184. The interaction of these various factors and the effects of the rundown of the labour force will be studied under two main headings: the efficiency of the financial mechanisms, and the development of costs.
185. This study will cover the last 20 years, and will also contain projections of trends up to 1975.

SECTION I - EFFICIENCY OF THE FINANCIAL MECHANISMS

186. In Chapter I, Section III, an outline was given of the financial mechanisms used in the four countries. Originally, they were based largely, if not exclusively, on earnings-related contributions.

Although this source of finance continues to be drawn upon, increasing demand is made on State aid and the general social security systems.

A - EARNINGS-RELATED CONTRIBUTIONS

187. In all four countries, during the last 20 years, despite rising earnings and higher rates of contributions or raised contributions ceilings, a steadily decreasing proportion of total finance has been drawn from earnings-related contributions, so that their value as a source of

funds has declined considerably as costs have risen inexorably. Indeed, earnings-related contributions are the first to suffer the impact of the rundown of the labour force; the transfer of costs to the State and the general social security systems is a secondary effect.

188. However, although there is this one constant, the raising of finance from earnings-related contributions has developed along different lines, as determined by the legal context.

§ 1 - In the Netherlands, the effects of the reduction of the number of contributors on the returns from earnings-related contributions are partially compensated for by the financial system of capitalization

189. Because the general systems of old-age insurance (AOW), widows' and orphans' insurance (AWW) and long-term disablement insurance (WAO), which are financed from deductions from earnings, are all operated in parallel, it was not possible in the Netherlands to raise the rates of contributions to the miners' retirement pensions systems, particularly during the period of recession in the mining industry. It was therefore inevitable that the rundown of the labour force should cause a lessening of the returns from earnings-related contributions. Thus, whereas contributions to the AMF had been 48.11 million guilders in 1961, they were only 26.4 million guilders in 1969.

190. It should be noted, however, that the effects of the rundown in the number of contributing employees have been less marked in the Netherlands than in the other countries because of the system of financing adopted there, which is based on capitalization. In the past, the rates of contributions had been deliberately calculated to cover not only the actual pension requirements but also provision for the extension of the range of social protection. Scope for the gearing of pensions to the cost of living and the improvement of insurance cover is provided by the amount of contributions left after payment of pensions and, as we will see later, by the substantial income from capitalized funds. Such scope can be used, for example, for the raising of AOW benefits, with the result that provisional pensions granted to workers in the mining industry under the age of 65 can be increased.

§ 2 - Substantial reduction of returns from earnings-related contributions in the Federal Republic of Germany, Belgium and France

191. The effects of the rundown of the labour force on the return from earnings-related contributions are more clearly discernible in the Federal Republic of Germany, Belgium and France, and are far from being counterbalanced by higher earnings or increased rates of contributions.
192. Despite frequent increases of earnings during the 20 year period and the raising of either rates of contributions (increase of more than 50% in Belgium, where the rate rose from 9% to 14% between 1945 and 1971), or of earnings ceilings on which contributions are payable (the earnings ceiling more than doubled in the Federal Republic of Germany between 1957 and 1971, and in France it is now six times higher than it was at the beginning of the 20 year period), the return from earnings-related contributions for pensions insurance only rose by 59.95% in the Federal Republic of Germany and 53.17% in France between 1955 and 1970. In Belgium, it fell from 954 to 842.4 million francs during the same period. Admittedly, there were sharp falls in the labour forces in these countries during the period: 47% in the Federal Republic of Germany, 48% in France, 70% in Belgium.
193. Taking the contraction of the labour force into account, the foreseeable return from earnings-related contributions in 1975 can be estimated at:
- 1,460 million DM in the Federal Republic of Germany, an increase of 18.70% over 1970, as against an increase of 53.15% in overall costs and a reduction of 10.7% in the labour force. In fact, the annual loss of revenue from contributions caused by the reduction of the number of contributors, the estimated figure for which was already 192 million DM in 1960, will probably be in the region of 1,823 million DM in 1975, or roughly 20% of the total insurance costs;
 - 306 million francs in France, a fall of 3.42% in relation to 1970, as against an increase in overall costs of 46.34% and a 35.95% reduction in the labour force as against 1970.

B - RELATIVE IMPORTANCE OF THE VARIOUS SOURCES OF FINANCE

194. The corollary of the relative decline of earnings-related contributions as a proportion of total financing has been the assumption of an ever-increasing share of insurance costs by the State or the general social security systems. The effects of this have been felt particularly strongly in the Federal Republic of Germany, Belgium and France, and although they have been less marked in the Netherlands, they have nevertheless been real.

§ 1 - Comparative outline of the situations in the Federal Republic of Germany and France

195. In the Federal Republic of Germany, since the last war at least, subsidies from the Bund have always been necessary in order to balance revenue and expenditure. The amount of these subsidies has risen steadily over the years, from 113 million DM in 1950 to 1,236 million DM in 1960 and 3,409 million DM in 1970 out of total revenue of 643 million DM, 2,670 million DM and 6,113 million DM respectively. At the same time, the amounts raised from earnings-related contributions fell from 72.32% (465 million DM) of the total amount of financing to 38.39% (1,025 million DM) in 1960 and 20.12% (1,230 million DM) in 1970 (1).

196. It has become necessary for the State to assume part of these insurance costs because earnings-related contributions have increasingly failed to meet requirements as the labour force has been run down (it rose from 601,000 in 1950 to 702,000 in 1957, and has since fallen steadily to the 1970 level of 351,000); a further factor contributing to this situation has been the granting of benefits to new categories of beneficiaries (cf. No. 168 above). The increase in the contribution from other pension systems to the financing of miners' retirement pensions (23.47% of total receipts in 1970, amounting to 1,435 million DM, of which 1,042 million took the form of reimbursements of parts of pensions) is largely attributable to the fact that an ever-increasing number of miners are taking up work in industries or undertakings covered by the general welfare systems rather than spending the whole of their working lives in mining, as they did in the past.

(1) The figures for years prior to 1960 do not include the Saarland.

197. In France, the State has made contributions to the financing of the miners' retirement pensions system for many years. In fact, the subsidizing of insurance dates back to a law passed in 1903. It was then based on short-term aid financed from annual credits from the State budget. In 1923, the notion of a fixed sum was abandoned and the subsidy was determined on the basis of the amount of earnings on which pension contributions were payable. The rate of subsidy, which rose from an initial 1% in 1923 to 4.50% in 1929 and 8% in 1945, was placed on an index basis from 1955, and then, from 1 January 1962, was set at 22% of earnings, whilst a supplementary annual contribution was also introduced with a view to maintaining the financial balance of the special pensions fund as the structure of the population covered by the system changed. Consequently, the State contribution to the financing of miners' retirement pensions in France has risen steadily in relation to the amount of earnings on which contributions are payable, from 8% in 1950 to 18.31% in 1960, 22.80% in 1965, 36.95% in 1968 and 40.16% in 1970 (22% from the normal contribution and 18.16% from the supplementary contribution).

State subsidies which, related to total insurance resources, accounted for one third of finance in 1950, 44.75% in 1960 and 55.15% in 1970. This should have decreased to 50.7% in 1975, mainly as a result of a drop in the numbers of wage-earners who form the basis of fixed-rate contributions (cf. above No. 56).

198. Since 1964, the general social security system has been making substantial contributions to the financing of French miners' retirement pensions. Indeed, the amount of the inter-trades excess compensation subsidy, as laid down in accordance with the provisions of the Finance Act of 19 December 1963, was already 13.38% of earnings subject to payment of contributions in 1964. After this, it rose as a percentage of earnings subject to payment of contributions and reached 16.11% in 1966.

The inter-trade excess compensation subsidy financed 27.32% of insurance in 1964, 30.88% in 1966, 31.59% in 1967, 21.46% in 1968 (because of changes in the method of calculation), 24.14% in 1969 and 26.76% in 1970.

199. It is anticipated that, between 1970 and 1975, there will be reductions in the numbers of workers concerned of 351,000 to 317,000 in the Federal Republic of Germany and of 164,000 to 105,450 in France, and it would appear that, provided that there is no modification in the financial machinery, the trend of financial resources will develop along broadly similar lines in the two countries. The reduction of resources based on wages (wage contributions in the two countries and fixed-rate State contributions in France) will increasingly have to be compensated by State equalization subsidies and by financial contributions from the general system (cf. table, annex V).

200. In 1975, pensions insurance revenue in the Federal Republic of Germany (9,362 million DM) is expected to break down as follows:

- 5,968 million DM in subsidies or reimbursements from public funds,
- 1,906 million DM in reimbursements from the general pension insurance systems,
- 1,460 million DM in earnings-related contributions,
- 28 million DM in miscellaneous receipts.

Thus, 63.75% of the insurance costs would be covered by the State, 20.36% by the general systems and 15.59% by earnings-related contributions.

201. For the same year in France, according to a similar breakdown of revenue (estimated at 2,705 million francs), 50.70% (1,398 million francs) of the insurance costs will be borne by the State and 37.29% (1,028 million francs) by the general system, 11.10% (306 million francs) being provided from earnings-related contributions and the remainder (25 million francs) being found from miscellaneous receipts.

§ 2 - Belgium

202. In Belgium, the State subsidies which, in 1948, were only 922.4 million francs for miners' pensions insurance and 168.3 million for disablement insurance, have risen very quickly, and are now substantial amounts, as witness the figures in the table below, which require no further comment:

Year	Pensions insurance			Disablement insurance		
	Earnings-related contributions	State subsidies		Earnings-related contributions	State subsidies	
		Amount	Percentage of total financing		Amount	Percentage of total financing
1948	855.5	992.4	53.70	180.2	168.3	48.29
1955	954.0	1,249.5	56.71	200.6	569.4	73.95
1965	816.9	2,876.2	77.88	156.1	2,718.5	94.57
1967	741.8	3,282.8	81.57	142.7	3,174.4	95.70
1970	842.4	-	-	132.6	3,352.3	96.20

203. The proportion of total financing found from earnings-related contributions has declined correspondingly, from 44.2% in 1950 to 29.1% in 1960 and 18.4% in 1967. The earnings-related contributions for disablement insurance are not sufficient to cover administrative costs. Thus, the insurance costs are in fact borne entirely by the State.

§ 3 - The special case of the Netherlands

204. The capitalization system adopted in the Netherlands provides the General Mine-workers Fund (AMF) with a considerable income each year, which accounts for more than half of total revenue (69.4 million guilders out of a total of 122.9 million in 1969). The return from earnings-related contributions accounts for less than a quarter (26.4 million guilders in 1969) of the annual revenue, the balance being made up by the State contribution (25.5 million guilders) and special contributions from the undertakings (1.5 million guilders), out of which long-service bonuses and compensation for loss of occupational status are paid. Moreover, the immediate effect of the law of 1964 (which raised the annual State contribution to 25.5 million guilders) was to reduce earnings-related contributions substantially (27.6 million guilders in 1964 as against 45.3 million guilders in 1963, a reduction of some 39%).

Furthermore, the financial mechanisms leave scope for large surpluses each year (in 1969: 122.9 million guilders in revenue as against expenditure of 72.9 million). As at 31 December 1970, the capitalized funds for future pensions amounted to 1,397 million guilders. As to the staff pension fund, the 1969 revenue of 60.7 million guilders was made up as follows: 38.3 million from investment income, 20.9 million from contributions and 1.5 million from public funds.

205. However, this does not mean that there is no risk of future reductions in the labour force causing the insurance system to lack the necessary financial resources to improve the miners' pensions.

SECTION II - DEVELOPMENT OF COSTS

206. The continuous rundown of the labour force in the coal-mines since 1960 has not only influenced the financial mechanisms but also the size and relative make-up of the

various pensions insurance benefits.

A - FACTORS LEADING TO HIGHER COSTS

207. As might be expected, pensions insurance costs have risen substantially over the last 20 years. Much of the increase is attributable to economic, historical, demographic and social causes which are unrelated to the recession of the mining industry. The rise in pension costs derives mainly from the adaptation of pensions to the cost of living, heavy recruiting in the past, longer life expectancy and improvements introduced into welfare systems.
208. Nevertheless, the recession in the mining industry does have an effect on pensions insurance costs in that it is causing an ever-increasing number of insureds to apply for payment of their pensions as soon as they become entitled to them or to apply for payment in advance insofar as national legislation permits (cf. above, No. 178 et seq.).

B - THE FORESHORTENING OF CAREERS IN MINING AND ITS CONSEQUENCES ON THE DEVELOPMENT OF COSTS

209. In the three countries (Federal Republic of Germany, Belgium and France) where the financial mechanisms are based on the distribution system, the additional costs arising out of the increase in the number of participants are reduced by the fact that, with the foreshortening of miners' careers, old-age benefits are not as high.
210. Thus, the annual cost of old-age benefits granted in respect of 15 years or more of service in the mines has remained much the same since 1969, at 55% of total expenditure, although the number of beneficiaries rose from 122,540 to 143,330 between 1960 and 1970.
- In Belgium, miners' old-age pensions, which accounted for 65.60% of total benefits in 1950, only took up 39.68% in 1967. It is true that, during this period, the number of persons drawing this type of benefit fell from 45,742 to 35,403, whilst the number of holders of widows' pensions rose from 34,557 to 47,738.
211. The figures for old-age benefits for workers having spent their working lives partly in the mines and partly in other occupations are still more instructive in this respect.

They show how the recession has brought about a reduction in the number of employees whose entire working lives are spent in the mines.

212. In the Federal Republic of Germany, the amounts reimbursed for this purpose by the workers' and staff pensions insurance systems rose from 47 million DM in 1950 to 381 million DM in 1960 and 1,042 million DM in 1970. According to the estimates, the amount should be 1,550 million DM by 1975.

In Belgium, the contributions of the miners' system to cover mixed careers rose from 982,225 Belgian francs in 1956 to 395,066,114 Belgian francs in 1967, or from 0.04% to 9.99% of the insurance costs.

In France, the number of old-age pensions granted to persons having been employed outside mining during part of their working life is increasing steadily; by the end of 1970, these benefits accounted for 3.80% of total insurance expenditure as against 0.95% at the end of 1960.

SECTION III - ASSESSMENT OF THE DIRECT FINANCIAL EFFECTS OF THE RUN-DOWN OF THE COAL-MINING LABOUR FORCE ON PENSIONS INSURANCE

213. Using different methods, the four experts who collaborated on this study have endeavoured to determine the direct financial effects of the rundown of the labour force on the development of the national miners' retirement pensions systems.

A - ESTIMATES FOR EACH OF THE FOUR COUNTRIES

§ 1 - Estimates for the Federal Republic of Germany

214. Since the rundown of the number of contributors, insofar as it reduced the return from earnings-related contributions, has brought about a corresponding increase in the contributions of the public authorities towards the financing of miners' retirement pensions, the German expert has made a comparison (in terms of percentages of total insurance expenditure) between the public resources which have actually proved necessary and the subsidies which would have been sufficient had there been no rundown in the number of employees.

His calculations show that the public contribution to the financing of miners' retirement pensions, having risen from 46.96% in 1960 to 54.10% in 1965 and 55.63% in 1970, should reach 63.75% in 1975, whereas, had there been no run-down in the number of employees, the corresponding set of figures would have been: 39.16% in 1960, 38.28% in 1965, 36.24% in 1970 and 42.84% in 1975.

The additional costs assumed by the public authorities as a result of the rundown in the number of employees in each of the years under consideration (1960, 1965, 1970 and 1975) can therefore be estimated at 215, 691, 1,304 and 2,146 million DM as against total expenditure of 2,632, 4,046, 6,128 and 9,362 million DM respectively.

215. The Belgian, French and Netherlands experts were unable to adopt the same method of calculation because, in these three countries, the State's contribution to the financing of miners' retirement pensions does not take the form of a balancing subsidy which simply makes up the difference between total insurance costs and the return from other sources of finance as it does in the Federal Republic of Germany. In Belgium, France and the Netherlands, the State's contribution is determined according to specific rules, certain aspects of which are not directly related to the development of population structures or the financial situation of the insurance systems (cf. Nos. 55, 56 and 57 above).

§ 2 - Estimates for the Netherlands

216. The Netherlands expert determined the variations of the costs of the AMF and the BFM both from reality, in terms of the real evolution of the ratio between the actively employed and pensioners and also on the basis of the hypothesis that this ratio would have remained the same as it was at the end of 1965, when official pit closures began, namely 67.4% in the case of the AMF and 26.6% in the case of the BFM. The following tables present the results of these calculations (1).

(1) The figures given in columns 6, 7, 8, 9, 10 and 11 are in thousands of guilders.

Year	Actual number of pensioners		Number of pensioners had the demographic ratio remained stable		Actual costs		Hypothetical costs	
	AMF	BFM	AMF 67.4%	BFM 26.6%	AMF	BFM	AMF	BFM
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1965	30,938	2,200	-	-	46,845	9,376	-	-
1966	31,992	2,346	27,641	2,156	55,241	10,345	47,728	9,507
1967	33,943	2,562	24,025	1,991	59,338	11,608	42,011	9,022
1968	34,764	2,677	21,173	1,876	68,924	15,441	41,975	10,820
1969	35,213	2,769	18,484	1,779	72,909	16,686	38,277	10,721
1970	36,000	2,850	17,052	1,623	78,000	18,000	36,972	10,251
(Es- ti- mate)								
.....
.....
1975	40,300	3,150	9,436	1,170	110,000	30,000	25,410	11,142

The above information has served as a basis for determining the additional costs arising out of the modification of the population structure, as shown in absolute figures and in percentages in the table overleaf.

Year	Additional costs as against actual expenditure			
	In absolute figures		In percentages	
	AMF (10)	BFM (11)	AMF (12) $\frac{\text{col. 10}}{\text{col. 6}}$	BFM (13) $\frac{\text{col. 11}}{\text{col. 7}}$
1965	-	-	-	-
1966	7,513	838	13.6	8.1
1967	17,327	2,586	29.2	22.3
1968	26,949	4,621	39.1	29.9
1969	34,632	5,965	47.5	35.7
1970	41,028	7,749	52.6	43.1
(Estimate)				
.....
.....
1975	84,590	18,858	76.9	62.8

§ 3 - Estimates for Belgium and France

217. In order to obtain an evaluation of the effects of the rundown of the number of subscribers in isolation from other factors, the French and Belgian experts, taking 1953 as their reference year, determined the amount (in percentage terms) of deductions from earnings which would have been necessary to cover pensions insurance expenditure during the period 1953-1970, assuming that the demographic composition of contributors and pensioners and the financial mechanisms being applied in 1953 had remained unchanged throughout the period. A projection up to 1980 was made on the same basis.

Once these calculations had been made, the consequences of the rundown of the number of contributors could be deduced from a comparison of variations in insurance costs and resources under the hypothetical conditions indicated above and under actual conditions.

218. The French research led to the conclusion that the resources required to finance retirement pensions expressed as a percentage of earnings on which contributions are payable have risen steadily from 30.78% in 1955 to 71.91% in 1970 and will probably correspond to 110.89% in 1975 and 163.83% in 1980 whereas, had the demographic pattern remained unchanged, the proportion of earnings would have been only 26.53% in 1955, 25.58% in 1965 and 23.45% in 1970, and would have fallen to 21.27% in 1975 and 20.98% in 1980.

219. The Belgian expert applied a slightly modified version of the method employed by the French expert and reached even more striking conclusions. Had the demographic composition remained stable and had the mining corporation retained its own retirement pensions system, the percentage of deductions from earnings which would have been necessary to cover expenditure would have been 18.11% in 1953, 19.39% in 1955 and 23.64% in 1959, after which it would have fallen gradually to 21.51% in 1965 and 18.51% in 1967, subsequently rising slightly to 21.26% in 1970, 20.30% in 1975 and 22.52% in 1980.

In the event, the resources required to cover expenditure expressed as a percentage of earnings subject to contributions were 20.24% in 1955, 28.35% in 1959, 40.62% in 1965 and 47.06% in 1967. Had the miners' own system survived, they would have risen to 84.78% in 1970, 138.94% in 1975 and 253.90% in 1980. Parallel conclusions could be drawn for disablement insurance.

B - COMPARISONS OF THE RESULTS

§ 1 - France and Belgium

220. The Belgian and French calculations are directly comparable (cf. above, Nos. 218 and 219).

221. Although these are the only two studies which can be compared directly, it has been deemed useful, in the absence of a closer analysis, to make a comparison, for illustrative purposes, between the calculations of the French expert and those of his German and Netherlands colleagues.

§ 2 - France and the Federal Republic of Germany

222. Application of the method adopted by the German expert to the data considered in the French study would show that, if the demographic structures of the system had remained unchanged, the contribution from public funds required to cover expenditure on old-age, disablement and death (surviving dependants' pensions), which was 33.33% in 1950, would have only risen to 39.69% in 1955 and 42.38% in 1960, and would then have fallen to 37.45% in 1965, 31.77% in 1970 and 24.78% in 1975.

In fact, having been 33.33% in 1950, the actual public contribution to the balancing of the finances of the French miners' retirement pensions system was 48.02% in 1955, 46.51% in 1960, 46% in 1965 and 55.15% in 1970, the projection for 1975 being 50.71%. If overriding occupational compensation of costs had not been organized with the general system as from 1965, the public contribution would have risen to 75.29% in 1965, 81.89% in 1970 and 88% in 1975.

223. The table overleaf shows a comparison of the relative importance of the public contribution to the financing of miners' retirement pensions in the Federal Republic of Germany and France.

Year	Actual demographic structure		If the demographic structures had remained unchanged	
	FRG	France*	FRG	France*
1950	-	33.33%	-	33.33%
1955	-	48.02%	-	39.69%
1960	46.96%	46.51%	39.16%	42.38%
1965	54.10%	46.00% x	38.28%	37.45%
1970	55.63%	55.13% x	36.24%	31.77%
.....
.....
1975	63.75%	50.71% x	42.84%	24.78%

* This contribution includes the returns from overriding inter-occupational compensation, the costs of which are borne by the general system; this accounted for 29.29% in 1965, 26.76% in 1970 and is estimated at 37.50% for 1975.

224. The slow increase in France of public contributions between 1950 and 1960 and the fact that they would have decreased between 1965 and 1975 had the demographic ratio not deteriorated are explained by the favourable conjunction of three sorts of factors: the gearing (introduced in 1962) of the earnings ceiling on which contributions are payable to the general incomes index (this has a favourable effect on resources without influencing the amount of pensions); the gearing of pensions to miners' earnings (increases in retirement pensions are automatically counterbalanced by corresponding increases in resources); the reduction of costs as a result of the foreshortening of careers in mining, on which the assessment of pensions is based.

§ 3 - France and the Netherlands

225. Analysis (Netherlands method) of the consequences of the rundown of the number of contributors in relation to the variations of insurance costs (actual and hypothetical on the supposition that demographic structures had remained unchanged) shows that, in France, during the period 1965-

1975, the changing of the demographic pattern caused additional costs rising from some 23.2% in 1965 to 31.1% in 1970 and 44.6% in 1975, representing amounts of 1,253 million francs for 1965, 1,884 million francs for 1970 and 2,757 million francs for 1975.

The results of these calculations are summarized in the table below, alongside the corresponding figures supplied by the Netherlands expert for the AMF.

Year	NETHERLANDS (AMF system)			FRANCE		
	Actual costs (in thousands of guilders)	Additional costs caused by demographic developments		Actual costs (in millions of francs)	Additional costs caused by demographic developments	
		In absolute figures	As a percentage of actual costs		In millions of francs	As a percentage of actual costs
1953	-	-	-	346	-	-
1965	46,845	-	-	1,253	291	23.2
1966	52,241	7,513	13.6	1,319	336	25.5
1967	59,338	17,327	29.2	1,413	402	28.5
1968	68,924	26,949	39.1	1,569	474	30.2
1969	72,909	34,632	47.5	1,722	567	32.9
1970	78,000	41,028	52.6	1,884	661	35.1
.....
.....
1975	110,000	84,590	76.9	2,757	1,230	44.6

CHAPTER V

THE PROSPECTS FOR FUTURE TRENDS
IN SICKNESS AND MATERNITY INSURANCE

226. In all four countries, the cost of medical care is increasing, apparently irreversibly, as medical techniques improve, mortality rates fall, and the standard of living and the conditions of modern life improve. In the case of the miners' sickness insurance systems, these general causes are compounded by particular aspects of the current situation in the mining industry, specifically demographic patterns and the current economic situation.
227. Under-employment caused by recession induces a psychological state which tends to lead to the taking of refuge in insurance. Moreover, studies of demographic structures should not be concentrated exclusively on the ratio between actively employed persons and pensioners, but should also cover the qualitative make-up of the groups concerned: actively employed and pensioned members, dependants of actively employed and pensioned members. In this respect, the age of the beneficiaries has significant repercussions on insurance expenditure.
228. A large number of varied factors affect the development of sickness insurance, and this adds to the difficulty in this branch of social security of evaluating the direct or indirect costs incurred by the modification of demographic structures. The complexity of the problem and the difficulties encountered in collecting the necessary data account for the brevity of the information supplied in some of the national studies.

SECTION I - ADDITIONAL COSTS OF SICKNESS INSURANCE CAUSED BY MODIFICATION OF DEMOGRAPHIC STRUCTURES

229. As has already been pointed out in this report (Chapter III - Section II, § 3), the average age of workers covered by pensions insurance has risen substantially. Clearly, the same applies to sickness insurance, although the persons covered by this latter branch of insurance are not exactly the same as those covered by pensions insurance, and

are generally more numerous.

230. It is noticeable that sickness insurance expenditure is gravitating from the actively employed to pensioners. This trend, which will become increasingly marked during the years to come, is the result of the increase in the number of persons drawing benefits in relation to the number of persons paying contributions (see above, No. 163 et seq.) and of increased life expectancy. In France, whereas the "pensioned persons and dependants" category accounted for 41.2% of persons affiliated to the system at the end of 1970 (392,422 out of 952,958), by the end of 1975 it will have reached 52.8% (392,650 out of 743,200). There exists a similar situation in the Federal Republic of Germany where the "actively employed and their dependants" group is expected to decrease by 9.44% between 1971 and 1975, whereas the "pensioners and pensioners' dependants" group is expected to rise by 4.12% during the same period (1).

231. Experience in the Netherlands corroborates these findings. Out of the membership of the AMF sickness fund, the "actively employed and their dependants" group has fallen from 133,775 in 1950 to 84,738 in 1969 (the forecast figure for 1975 is 43,000), whereas, during the same period, the "pensioners and pensioners' dependants" group rose from 16,639 to 44,812, and is expected to reach 52,000 by 1970. (These figures include workers in the chemicals industry).

(1) Information supplied by the Bundesknappschaft.

	Actively employed	Dependants of the actively employed*	Pensioners	Pensioners' dependants*
1971	392,000	689,920	729,000	393,660
1975	355,000	624,800	759,000	409,860
Decrease	37,000	65,120	In-crease 30,000	16,200
	<u>9.44%</u>	<u>9.44%</u>	<u>4.12%</u>	<u>4.12%</u>
* Figures based on a representative study carried out in 1967.				

The staff fund (BFM) has displayed a similar trend: the numbers of the "actively employed and their dependants" group fell from 30,000 to 26,932 between 1959 and 1969.

Conversely, the "pensioners and their dependants" group increased in numbers from 2,191 to 4,634 between 1959 and 1969. It will be remembered that the BFM staff medical care insurance was abolished on 1 January 1971 (cf. No. 65 above).

232. This trend gives rise to insurance savings in the field of benefits in specie (daily compensation) but, on the other hand, it also involves additional costs in benefits in kind, as medical care requirements increase with the rise in the average age.
233. It is of interest to recall, in this connection, that the research carried out in France by the Caisse autonome nationale de la sécurité sociale dans les mines in 1969 showed that the cost of benefits in kind for a member of the "pensioners and pensioners' dependants" category was 73% higher than that for a member of the "actively employed and their dependants" category. In this same country, the additional medical care costs caused by the ageing of the insured population has risen from 52% in 1961 to 78% in 1970, although it should stabilize in the future at around 70%.
234. On the subject of dependants, an interesting comparison can be made between the Federal Republic of Germany and France.

In both countries, the number of dependants in the "pensioners" group is relatively stable, although decreasing slightly in the Federal Republic of Germany (55.55% between 1963 and 1966 and 54.05% between 1967 and 1970; 66% in France throughout both these periods). During both periods, the percentages of dependants in the "actively employed" group was 174.48% and 176.06% in the Federal Republic of Germany, and 233% and 240% in France. However, in the latter country, the number of dependants of actively employed workers has fallen substantially as a result of the ageing of the working population: against 554,000 at the end of 1965 and 395,800 at the end of 1970, the total should have fallen to 245,100 by the end of 1975 and 149,000 by the end of 1980.

235. In the Netherlands, the number of AMF medical care fund dependents per insured in the "actively employed" and "pensioners" groups rose from 1.97 and 0.80 respectively in 1955 to 2.05 and 0.84 in 1969. By 1975, they will probably be 2.07 and 0.79 respectively. It should be noted that these figures include workers and pensioners in the chemicals industry.

SECTION II - THE TREND OF COSTS

236. In the Netherlands, between 1950 and 1969 the costs per insured of the AMF sickness fund rose from 36.19 guilders in 1950 to 93.05 guilders in 1960, 175.88 guilders in 1965 and 340.36 guilders in 1969.

237. During the same period, sickness insurance costs per insured (actively employed and pensioned) rose as follows:

- in the Federal Republic of Germany, from 146.61 DM in 1950 to 384.17 DM in 1960, 603.97 DM in 1965 and 944.24 DM in 1969. Taking into account a 9% annual increase in expenditure and a population trend entailing a 9.94% reduction in the number of persons actively employed and a 4.96% increase in the number of pensioners as compared with 1970, total expenditure by 1975 should be 1,728 million DM, or 1,661.16 DM per insured.
- in France, from 128 francs in 1950 to 496 francs in 1960, 875 francs in 1965 and 1,460 francs in 1969 (1). Assuming a 9% annual increase in benefits and a 4.7% annual reduction in the number of insureds, combined with a reduction in the labour force from 164,648 to 105,450 between 1970 and the end of 1975, sickness insurance costs should be 1,010 million francs by 1970, or 2,885 francs per insured.

238. The Belgian expert was unable to make a breakdown of expenditure for each of the socio-occupational categories (workers, staff, miners) for all the years considered above.

(1) The figures shown in the French study under No. 185 are substantially lower than those indicated above, because they refer to the annual unit cost of total expenditure on sickness, maternity and death insurance per beneficiary rather than per insured (actively employed and pensioned).

239. In the other three countries, the percentage increases of expenditure during the periods considered are as shown in the table below:

Year	Netherlands	FRG	France
1950 to 1960	157.12%	162.02%	287.50%
1960 to 1965	89.02%	57.21%	76.41%
1965 to 1969	93.52%	54.40%	66.86%
1969 to 1975	-	65.09%	97.60%

240. Since sickness insurance in the Federal Republic of Germany, France and the Netherlands is administered individually and financed on a distribution basis, the population trends referred to above and the substantial increases of costs have already posed serious financial problems in the recent past.

241. There are apparently no special measures for resolving these problems under consideration at present in the Federal Republic of Germany or the Netherlands.

242. In France, where the present financial mechanisms of the miners' system have shown a deficit of some 100 million francs on expenditure of 694 million for the year 1970 alone, a solution has been sought in the introduction of a system of inter-occupational compensation of the costs of sickness insurance benefits in kind which operates between the general social security system for employees in commerce and industry and the miners' system and a number of other special systems. This arrangement, introduced under the finance act for 1972 (Law No. 71-1,061 of 29 December 1971), which has been in operation since 1 January 1972, is designed to mitigate the financial consequences of demographic disparities between the various welfare institutions.

243. To this purpose, the persons covered by the special systems concerned are treated, for the purposes of administration of benefits in kind, in the same way as persons coming under the general system. Consequently, these special systems are required to pay contributions into the general system in respect of both actively employed members

and pensioned members whose age is lower than the average recorded age for retirement under the general system.

In return, the general system assumes responsibility for benefits in kind to actively employed and pensioned members of the special systems and their dependants, which are paid on the same basis as if the entitlement to benefits of the persons concerned was that conferred under the general system. The difference between the contributions payable by each of the special systems and the amount of benefits for which the general system assumes responsibility represents the amount of the inter-occupational compensation subsidy made available by the general social security system.

GENERAL CONCLUSION

244. Having been the "food" of Western European industry for one and a half centuries, coal has been in a severe decline since 1960 in the face of the advent of new sources of energy. The inevitable outcome of this decline will be that, within the next few years, coal will either no longer feature or be restricted to a subsidiary role in the energy plans of modern states.
245. As a means of improving the attractiveness of an uncongenial occupation which was for many years indispensable to the economic life of industrialized states, the miners' welfare systems have always corresponded to the operational requirements of the extractive industry and have always had a bearing on its productivity. The successful operation of these systems helped to provide the social guarantees essential to productivity among the workers. Their history coincides with the birth, expansion and decline of coal energy.
246. The decline of coal energy poses the problem of the present and future value of the miners' welfare systems. These systems exist to provide cover for occupations which were once essential to national economies, but now appear less indispensable and will perhaps prove to be of no further value in due course. If this is the case, how does one envisage the future of socio-occupational systems whose demographic structures have been compromised irreversibly?
247. This question calls for answers in terms of technical organization and financing. Each country has provided these answers according to its own particular characteristics and in the light of the doctrinal concepts which have determined the shaping and development of its national miners' social security system.
248. The fact that the Netherlands miners' system is complementary to the national welfare system renders the problem somewhat less pressing, despite the imminence of the complete close-down of all mining operations.
249. In order to maintain the level of social protection granted to mine-workers and their families, despite an

unfavourable demographic pattern, Belgium has merged the miners' retirement pensions system into a single system which includes manual workers, white-collar workers and seamen, whilst allowing the Fonds national de retraites des ouvriers mineurs and the five provident funds under its direction to continue to operate, with specific terms of reference.

It should be noted that at no time in its history has the Belgian miners' social security system included all persons employed in the industry; white-collar workers and management have always been excluded.

250. With similar problems, the Federal Republic of Germany and France have sought similar means of adapting the technical structures of insurance to the new economic and demographic situation, although the special systems have hitherto retained greater autonomy.
251. The merging of the administration of German sickness and pensions insurance under a single body - the Bundesknappschaft - by the terms of the law of 28 July 1969 was as much designed to strengthen the efficiency of technical administration as to implement the clear intention of the authorities to perpetuate the autonomy of the special system in spite of the rundown of the mining labour force.
252. Similarly, in France, all the administrative or financial reforms introduced in the light of the declining number of contributing members have been accompanied by precautions to ensure that they do not jeopardize the autonomy of administration of the mining institutions. Nevertheless, the restructuring of the technical organization with a view to achieving greater centralization has been carried out in a rather cautious manner. Apart from the transfer of the administration of family benefits to the Unions régionales de sociétés de secours minières in 1954, the only administrative reorganization to date has been a few mergers of welfare societies, whose number has been reduced from 54 to 42, and the opening of certain health or social facilities to members of other socio-occupational groups. Further efforts to achieve centralization and to make facilities available to a wider population should undoubtedly be made in order to obtain

the best possible return from the administrative and health facilities of the system as the mining labour force is run down.

253. In the case of systems financed from earnings-related contributions based on the distribution mechanism, the deterioration of the ratio between contributing members and beneficiaries has meant that they are run at a loss. Consequently, outside financial assistance has become essential. In our view, such assistance for the miners' systems is perfectly justified. Suffice it to recall the immense contribution which the mining body has made to the economic development of the various countries and the substantial earnings-related contributions formerly levied on these pioneers of social insurance under capitalization systems which were subsequently eroded by depreciation. It is only just that nations should show their solidarity with the miners in coming to their aid at a time when the ageing of the labour force has disrupted the working of their social security system.

254. Such national solidarity may find expression in various forms: by the limitation of benefits to employed persons only, by the extension of them to the nation as a whole or, finally, by the sharing of costs between employed persons and the nation as a whole.

The first method has been used in Belgium where, in order to cover the deficits of the mine-workers' system, their system has been merged with the other insurance systems for employed persons. The second method has been preferred in the Federal Republic of Germany, where the revenue deficiencies of the miners' retirement pensions system are simply covered by a balancing subsidy granted by the authorities. In France, the third method has been adopted: in view of the demographic structures, shortfalls on earnings-related contributions are made up by subsidies borne by the national budget (miners' retirement pensions) and the inter-occupational compensation scheme of the employed persons' social security system (miners' retirement pensions and sickness insurance).

255. The financial problems encountered in the operation of the miners' social security systems cannot detract from the

value of their achievements or their social worth.

256. Although they were introduced for the benefit of specific socio-occupational groups, these systems have for long been used as testing grounds where generalized schemes for other categories of employed persons or national schemes have first been tried. In their development, they have been excellent servants to the mining economy, contributing to the attractions of the industry during its period of expansion and facilitating redeployment policies during times of crisis.
257. The attachment of the mine-workers to their social security systems would suffice, were it necessary, to demonstrate the excellence of the facilities made available to them and the need to retain them. There are serious grounds for believing that the extension of some of them outside mining circles, either directly or by analogy, would improve the national social security systems considerably.

TABLES ANNEXED

- I - STATUTORY QUALIFYING AGES FOR THE OLD-AGE PENSION
- II - CONTRIBUTORS TO AND BENEFICIARIES UNDER THE MINERS' PENSIONS INSURANCE SYSTEM
- III - BREAKDOWN OF SUBSCRIBERS TO THE PENSIONS INSURANCE SYSTEM INTO AGE GROUPS, IN PERCENTAGES OF THE TOTAL NUMBER
- IV - PATTERN OF THE NUMBER OF PERSONS DRAWING PENSIONS BETWEEN 1950 and 1970
- V - RELATIVE IMPORTANCE OF THE VARIOUS SOURCES OF FINANCE FOR PENSIONS INSURANCE IN RELATION TO TOTAL RECEIPTS
- VI - RELATIVE IMPORTANCE OF THE ANNUAL COSTS OF THE VARIOUS BENEFITS OUT OF THE TOTAL AMOUNT OF BENEFITS
- VII - PERCENTAGE BREAKDOWN OF ACTIVELY EMPLOYED SUBSCRIBERS TO THE SICKNESS INSURANCE SYSTEM, IN AGE GROUPS

THE STATUTORY QUALIFYING AGES FOR THE OLD-AGE PENSION

Country	QUALIFYING AGES			
	No age qualification	50 years	55 years	60 years
Federal Republic of Germany			Compensatory allowance for mine-workers: 25 years' affiliation and a service record including certain types of work underground; it is also necessary to have left one's work in mining after reaching the age of 55 years**	Old-age pension for older miners (25 years' affiliation**) Early old-age pension for unemployed persons or female insureds.
Belgium	Old-age pension subject to 30 years' underground work, including 185 four hour days or 1,480 hours per calendar year	-	Old-age pension for underground workers and those treated as being in the same category.	Old-age pension for men under the general system.
France	Old-age pension subject to a minimum of 15 years' service in the mines and at least 300 permanent disablement caused by occupational silicosis contracted in the mines, in respect of which compensation is payable by the special miners' social security system. Early retirement pensions.	Old-age pension subject to 30 years' service in the mines, including 20 years underground.	Old-age pensions and other allowances for miners.	Coordination pension under the general system.
Netherlands	-	-	AMF system old-age pension, subject to 25 years' service underground or more (immediate and deferred rights*)	AMF system old-age pension, subject to more than one and less than 10 years' affiliation (immediate rights*). AMF system old-age pension, subject to at least one years' affiliation (deferred rights*). BFW system old-age pension (deferred rights*): 1) For former female employees, deduction of one year for each year of affiliation above 20, the minimum age being 60 years however; when the date of dismissal is within 5 years of the pension age, periods of work outside the mines are taken into account as if the insured was still affiliated. 2) For other employees (immediate and deferred rights*) with a minimum of 25 years' service, the retirement age is:

* THE NETHERLANDS

"Immediate" pension rights are available to:

- 1) Workers who are retired, immediately they stop work,
 - 2) Workers laid off because of reductions in production when they are within 5 years of the statutory qualifying age for the old-age pension,
 - 3) Workers entitled to benefits under the law on "social" work (WSW).
- "Deferred" rights for other workers.

61 for 25 to 29 years of service underground,
62 for 20 to 24 years of service underground,
63 for 15 to 19 years of service underground,
64 for 10 to 14 years of service underground.

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Annex II

Contributors to and beneficiaries under the miners' pensions insurance system - In thousands -												
Year	FRG			Belgium			France			Netherlands AMF system		
	Sub- scri- bers	Bene- fici- aries	%	Sub- scri- bers	Bene- fici- aries	%	Sub- scri- bers	Bene- fici- aries	%	Sub- scri- bers	Bene- fici- aries	%
1950	601	566	94,18	-	98	-	405	243	60	45	14	30,3
1951	632	593	93,83	163	103	63,19	392	253	64	48	14	29,1
1952	656	607	92,53	161	105	65,22	370	261	70	52	15	28,7
1953	667	624	93,55	156	108	69,23	350	268	77	52	15	29,6
1954	661	639	96,67	149	110	73,83	330	277	84	54	17	31,2
1955	668	652	97,60	152	111	73,03	316	286	90	53	19	35,4
1956	688	668	97,09	145	112	77,24	313	295	94	53	20	37,2
1957	702	647	92,17	154	113	73,38	314	303	96	54	21	38,4
1958	675	598	88,59	141	115	81,56	310	311	100	55	22	39,9
1959	619	604	97,58	122	119	97,54	303	318	105	53	23	44,1
1960	639	691	108,14	103	134	130,10	285	326	115	50	24	48,1
1961	613	697	113,70	89	128	143,82	274	335	122	49	25	52,2
1962	573	707	123,39	86	130	151,16	267	340	127	49	27	53,8
1963	546	714	130,77	86	131	152,33	257	346	135	47	28	59,5
1964	530	721	136,04	87	132	151,72	249	352	142	48	29	62,0
1965	501	736	146,91	76	132	173,68	239	359	150	46	31	67,4
1966	446	726	162,78	64,5	132	206,25	227	366	160	41	32	78,0
1967	386	736	190,67	57	132	231,58	211	375	178	36	34	95,2
1968	362	743	205,25	50,5	-	-	193	383	194	31	35	110,7
1969	351	750	213,68	43	-	-	178	388	218	27	35	128,4
1970	355	753	212,11	-	-	-	165	392	238	24,6	35	142,3
(Estimate) 1975	317	783	247	25,8	126	488,37	106	410	386,79	nil ⁽¹⁾	39	

(1) For the purposes of this study, the number of subscribers in 1975 may be considered as nil, although the rundown of the mining labour force will not have been completed entirely.

Relative importance of the various sources of finance for pensions insurance in relation to total receipts

(In millions of the national currency)

Sources of finance	YEARS															
	1950				1960				1970				1975 (Estimate, assuming the financial mechanisms remain unchanged)			
	FRG	Belgium (1)	France	Netherlands (ANP)	FRG	Belgium (1)	France	Netherlands (ANP)	FRG	Belgium (1)	France	Netherlands (ANP)	FRG	Belgium (1)	France	Netherlands (ANP)
Earnings-related contributions	465 (72,32 %)	834 (44,20 %)	148 (66,67 %)	19,98 (58,34 %)	1,025 (38,39 %)	832 (29,10 %)	397 (54,16 %)	41,20 (52,00 %)	1,230 (20,12 %)	741,8 (18,4 %)	317 (16,83 %)	24,62 (18,65 %)	1,460 (15,59 %)	-	306 (11,10 %)	-
State subsidies	113 (17,57 %)	1,053 (55,80 %)	74 (33,33 %)	7,92 (23,12 %)	1,236 (46,29 %)	2,027 (70,90 %)	328 (44,75 %)	8,47 (10,69 %)	3,409 (55,77 %)	3,283 (81,56 %)	1,039 (55,15 %)	25,35 (19,20 %)	5,968 (63,75 %)	-	1,398 (50,71 %)	8,5 (10,18 %)
General system	47 (7,31 %)	-	-	-	381 (14,27 %)	-	-	-	1,435 (23,47 %)	-	504 (26,75 %)	-	1,966 (20,36 %)	-	1,028 (31,29 %)	-
Other revenue	18 (2,80 %)	-	-	0,35 (1,02 %)	28 (1,05 %)	-	8 (1,09 %)	-	39 (0,64 %)	-	24 (1,27 %)	1,46 (1,10 %)	28 (0,30 %)	-	25 (0,90 %)	-
Income from capital	-	-	-	6,00 (17,52 %)	-	-	-	29,56 (37,31 %)	-	-	-	80,60 (61,05 %)	-	-	-	83,50 (89,82 %)
Total revenue	643	1,887	222	34,25	2,670	2,859	733	79,23	6,113	4,024	1,884	132,03	9,362	-	2,757	92,00

(1) In Belgium, the financing of disablement pensions, for which the State is virtually entirely responsible, is not included.

Relative importance of the annual costs of the various
benefits out of the total amount of benefits

Type of benefit	Country	YEARS			
		1955	1960	1965	1970
Old-age pensions	FRG (1)	-	1 547 474 400 (69,21 %)	2 381 822 400 (66,62 %)	3 348 072 000 (65,18 %)
	Belgium (2)	1 384 184 242 (63,49 %)	1 624 528 400 (56,12 %)	1 745 898 200 (46,79 %)	-
	France (3)	22 555 000 000 (62,26 %)	413 362 280 (64,02 %)	692 302 750 (65,60 %)	1 028 942 560 (65,40 %)
	Netherlands (4)	14 630 633 (75,10 %)	23 997 191 (74,38 %)	29 238 805 (73,00 %)	40 282 709 (65,37 %)
Widows' pensions	FRG (1)	-	656 136 000 (29,35 %)	1 018 137 600 (29,33 %)	1 582 022 400 (31,09 %)
	Belgium	995 234 667 (27,30 %)	998 042 700 (31,02 %)	1 317 682 800 (35,31 %)	-
	France (3)	7 485 000 000 (20,66 %)	129 091 360 (19,59 %)	202 692 270 (19,20 %)	299 436 330 (19,03 %)
	Netherlands (4)	3 090 543 (15,86 %)	4 802 529 (15,01 %)	5 074 429 (15,17 %)	8 187 890 (13,29 %)
Pensions for mixed careers	FRG (1)	-	-	-	-
	Belgium	-	91 271 135 (3,15 %)	285 643 671 (7,66 %)	-
	France (3)	400 000 000 (1,10 %)	1 185 520 (1,11 %)	28 238 110 (2,68 %)	71 637 410 (4,55 %)
	Netherlands (4)	-	-	-	-
Other benefits	FRG (1)	-	32 304 000 (1,44 %)	71 006 400 (2,05 %)	159 426 000 (3,13 %)
	Belgium (2)	200 730 885 (9,21 %)	261 121 200 (9,71 %)	382 193 800 (10,24 %)	-
	France (3)	5 790 000 000 (15,98 %)	96 058 640 (14,86 %)	132 223 840 (12,52 %)	173 297 270 (11,02 %)
	Netherlands (4)	1 760 325 (9,04 %)	3 202 940 (10,01 %)	4 741 090 (11,81 %)	13 155 242 (21,34 %)
General total	FRG (1)	-	2 235 914 400	3 470 966 400	5 089 520 400
	Belgium	2 180 149 794	2 894 949 435	3 731 418 471	-
	France (3)	36 230 000 000	645 697 800	1 055 416 970	1 573 313 570
	Netherlands (4)	19 481 501	32 002 660	40 094 324	61 625 801

(1) In the case of the FRG, the amounts of the various benefits have been estimated by multiplying the number of current pensions (Table 3, German study) by the average amounts of the various benefits (Table 5, German study) for each year considered.

(2) In the case of Belgium, disablement pensions are excluded.

(3) In the case of France, the differences between the percentages in this table and Table No. 7 in the French study are explained by the fact that Annex VI of the comprehensive report shows the proportions of the various benefits in the total amount of benefits, whereas Table No. 7 of the French study shows the progress of costs in relation to total insurance expenditure, including ancillary costs, which accounted for 10.37%, 14.29%, 15.80% and 16.50% in 1955, 1960, 1965 and 1970 respectively.

(4) AMF system.

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Annex VII

Percentage breakdown of actively employed
subscribers to the sickness insurance system, in age groups

	1955				1969-1970			
	FRG	Belgium	France	Netherlands	FRG (1970)	Belgium (1970)	France (1969)	Netherlands (1969)
Less than 25	24,8	14,5	15,6	26,8	9,6	6,4	7,1	10,8
Over 25 and less than 35	24,7	36,6	33,5	30,4	19,7	27,8	19,3	19,3
Over 35 and less than 45	16,6	25,2	23,5	23,0	33,0	40,6	39,1	26,3
Over 45 and less than 55	22,7	17,6	23,1	15,7	24,0	16,9	30,3	35,3
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