

A REVIEW OF THE WORLD

SHEEPMEAT MARKET

OVERVIEW OF INTERNATIONAL TRADE

N. BLYTH

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## THE AGRICULTURAL ECONOMICS RESEARCH UNIT

Lincoln College, Canterbury, N.Z.

THE UNIT was established in 1962 at Lincoln College, University of Canterbury. Its major sources of funding have been annual grants from the Department of Scientific and Industrial Research and the College. These grants have been supplemented by others from commercial and other organisations for specific research projects within New Zealand and overseas.

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## PREFACE

This volume is the first in a series of five reviewing the world sheepmeat market. Other volumes in the series are as follows: Volume 2 presents a review of sheepmeat production, consumption and trade in the major exporting countries of New Zealand, Australia and Argentina. Volume 3 reviews the sheepmeat market in the EEC whilst Volume 4 concentrates on North America, Japan and the Middle East. Volume 5 reviews the sheepmeat market in East European Countries.

The present paper (Volume 1) gives an overview of the world sheepmeat market and can be considered a summary for the whole series.

The five volumes of this Discussion Paper form part of the AERU's programme of research in the marketing and international trade area. Other papers relevant to sheepmeat markets published recently by the AERU include Research Report No. 109 by R.L. Sheppard on Changes in U.K. Meat Demand, Discussion Papers No. 51 and 59 by N. Blyth on the EEC Sheepmeat Regime and Discussion Paper No. 52 on Future Directions for New Zealand Lamb Marketing.

P.D. Chudleigh,  
Director.



## SUMMARY

The pattern of production, consumption and trade in sheepmeats has distinct characteristics. Whilst most countries have a domestic sheep industry, very few are actively involved in international trade.

The trade has traditionally been dominated by exports from the southern hemisphere (N.Z., Australia and Argentina) to the northern hemisphere (mainly the U.K.). This pattern has changed markedly during the 1970's; the decade has seen an increase in both volume and value of trade; an increase in the number of countries involved in trade (reducing the dominance of the major traders); and a shift in the composition of trade away from mutton as a staple food towards high quality lamb, and away from live sheep to carcass meat trade.

A long term decline in the major market, the U.K., has been offset by the steady expansion of markets in Japan, North America, the U.S.S.R. and other EEC member states, and the fortuitous and more dramatic appearance of a large market in the Middle East. At the same time there has been an increase in regulation of the market through, for example, Government contracts, controls on trading companies and the introduction of a common policy on sheepmeat in the EEC.

The outlook is for a further increase in exports, mainly from N.Z., Australia and Eastern Europe. The downward trend in consumption in the traditional lamb-eating countries is likely to continue, whereas in low consumption countries the general expansion in demand can be expected to continue.



Increasing self-sufficiency in the former group (as a result of higher domestic production and falling total consumption) should be offset by the growing import demand in the latter group, where consumption growth is projected to outstrip production.

1.        INTRODUCTION

This discussion paper presents a review of the world sheepmeat market. Although parts of the market have been analysed in detail (Chetwin, 1968; Yandle, 1968; Sheppard, 1980; Regan, 1980) the majority of studies cover the world "meat" market, and include sheepmeats only incidentally. It was considered, therefore, that a series of papers on particular countries and regions involved in sheepmeat consumption, production and trade would be useful in drawing together existing studies and providing a factual background to the market.

The pattern of production, consumption and trade in sheepmeats has distinct characteristics, with trade traditionally being dominated by the flow from the southern to the northern hemisphere. This pattern, however, has changed markedly during the 1970's. The decade has seen an increase in both volume and value of trade; an increase in the number of countries involved in trade (reducing the dominance of the major traders); and a shift in the composition of trade, away from mutton as a staple food towards high quality lamb, and away from live sheep to carcass meat trade.

This paper considers these trends in production, consumption and trade in the world sheepmeat market over the 21 years 1960-1980. Prices, trade barriers and trade agreements are discussed, and future implications of current trends are assessed. Projections are based on those made by FAO (1979) for the year 1985.

Other volumes in this series of discussion papers analyse in more depth the trends within major trading countries. Volume 2 covers the main traditional exporting countries of the southern hemisphere: Australia, N.Z. and Argentina. Volume 3 covers the main traditional importing region, the EEC (10). A number of new markets have developed in recent years (the U.S., Canada, Japan and the Middle East), and these are dealt with in Volume 4. The final Volume 5 covers another block of preferential trading countries, Eastern Europe, which is comprised of a net importer (the U.S.S.R.) and several net exporters (the Eastern Bloc countries and Mongolia). Though some countries such as South Africa, India, Pakistan and China are important producers and consumers of sheepmeat they have little involvement in world trade at present, and are therefore not discussed specifically here.

The term "sheepmeat" as used in the papers covers mutton, lamb and goat-meat, though the latter is of little importance in terms of trade. Trade in live sheep is also covered briefly as its decline has been accompanied by a growth in carcass meat trade.

Data used in the studies have been drawn mainly from USDA and FAO series; national sources are sometimes reported but are often incompatible with international series, as a result of different bases. Series from countries in the southern hemisphere are standardised to cover the calendar year (e.g. 1970, not the season 1970/71). Tables throughout are taken from Foreign Agriculture Circulars of USDA unless otherwise stated.

## 2. PRODUCTION

### 2.1 General Trends: 1960-1980

Sheepmeats constitute a minor category of meat in the world, accounting for only 6 percent of world meat production in 1980. World production of sheepmeat has changed little over the 21 year period (from 1960) and varies around 4,800 thousand tonnes (Kt) annually in the main trading countries.<sup>1</sup> Though most countries have a sheep and goat industry, production on any significant scale is confined to a relatively few countries. Total sheep numbers increased gradually during the 1960's, reaching a peak of 1,040 million in 1970. Poor wool prices combined with high beef prices caused a decline until 1975, when stock numbers increased again, and have remained stable since 1976 at around 1,050 million head. The distribution of sheep amongst the main producers is shown in Table 1. The Soviet Union (U.S.S.R.), Australia and India (not shown) have the largest stocks, of over 100 million sheep. New Zealand (N.Z.), Turkey, China (not shown), South Africa, Iran and Argentina have stocks of over 30 million. Other important countries are the United Kingdom (U.K.), France, Greece and Spain in Western Europe; Bulgaria, Rumania and Mongolia in Eastern Europe and Uruguay, Brazil and Peru in South America, each of which has over 10 million sheep.

<sup>1</sup> Much of the general background material in the following sections is drawn from Brabyn (1978), NZMPB (1977) and Regan (1980).

TABLE 1  
Sheep Numbers in the Main Regions  
 (Million Head)

	1960	1970	1975	1980*
Australia	155	180	152	135
New Zealand	47	60	57	66
Asia	223	265	279	221
Africa	116	138	137	135
U.S.S.R.	136	131	145	144
South America	120	123	110	113
North America	41	28	22	18
East Europe	41	41	41	45
EEC (9)	42	48	43	48
West Europe (non EEC)	39	26	30	28
<b>Total</b>	<b>961</b>	<b>1,040</b>	<b>1,018</b>	<b>1,050</b>

Source: USDA

(\* Preliminary)

Sheep production is distributed rather differently (Table 2) with the U.S.S.R., Australia and New Zealand each producing over 500 Kt, the U.K., Turkey, India and Iran producing over 200 Kt and the U.S., Argentina, France, Greece, Spain and S. Africa each producing over 100 Kt per annum.

Production systems throughout the world are diverse. In some countries sheepmeats are regarded as the by-product of the sheep industry, greater emphasis being placed on wool or milk production (eg Italy, Australia, Greece). Consequently, the efficiency of sheepmeat production varies enormously between countries, and production patterns and systems tend to reflect traditional and environmental factors rather than economic factors.

In most countries sheep farming is an extensive, pastoral activity, and is often stratified with primary breeding flocks located in hill and mountain regions, and fattening flocks in the lowlands. In other countries it is based more on the nomadic way of life. As a result of the pastoral dependence, sheepmeat production tends to be seasonal. Lambs are generally born in the spring and lamb production is concentrated over the summer/autumn period. Production is complementary therefore in northern and southern hemispheres. Lamb supply responds mainly to changes in lamb prices, though wool prices and the profitability of alternative enterprises also have an effect.

Mutton production (generally the meat from older, cull sheep) is less seasonally concentrated. Its supply in the long-run responds more to changes in prices of wool, lambs and sheep-milk than to changes in mutton prices.

TABLE 2  
Production of Sheepmeats  
In the Main Trading Regions  
(Kt)

	1960	1970	1980*
U.S.S.R.	968	926	855
Australia	568	548	505
New Zealand	448	491	529
EEC (9)	445	534	550
Argentina	169	123	130
U.S.A.	348	186	134
Asia	776	1,059	1,051
Africa	131	242	233
East Europe	164	182	199
West Europe (non EEC)	236	276	305
<b>Total</b>	<b>4,486</b>	<b>4,835</b>	<b>4,717</b>

Source: USDA

(\* Preliminary)

It would be impossible to assess the amount of each type of sheepmeat produced as precise definitions vary, and usually no distinction is made in official data sources.

## 2.2 Regional Trends in Production

As indicated above, world sheep numbers and sheepmeat production have been reasonably stable over the period. This is true for many countries and regions, whereas others have shown distinct trends, as outlined here.

Within the EEC the sheep industry has a different basic structure from other agricultural enterprises. Although there are some semi-industrialised fattening units, sheep farming is based essentially on an extensive operation in mountain and hill areas and other less productive regions. The size and characteristics of the sheep enterprise are determined primarily by social and environmental factors rather than market forces, and, as a consequence, the industry is not particularly responsive to short and medium term market changes. The industry is therefore unlikely to be responsive to market manipulation so it appears as if there will be little further increase in sheep numbers or production in Europe.

It has been suggested that higher prices resulting from the implementation of a common regime for sheepmeats might trigger some expansion of output (Kelly, 1978; MLC, 1981). However, potential is severely limited by physical constraints on breeding capacity. At the same time, it seems unrealistic to envisage a situation in which sheep breeding (as distinct from fattening) became sufficiently profitable to displace other enterprises on more intensive



lowland farms. So whilst increased prices may stimulate a marginal expansion in production, a substantial increase appears unlikely.

In North America sheep numbers and production have been declining continuously since 1943. This decline is the result of reduced breeding flocks in open range and mountain regions where a combination of rising input costs, more profitable alternatives and losses caused by predators have reduced the attraction of sheepmeat production. For these reasons sheep farming is unlikely to expand, though it appears that the long term decline has ceased.

In the U.S.S.R. sheep numbers have increased only slightly; the rate of expansion has been limited by climatic conditions and by the low priority given to sheep relative to other livestock enterprises. In other East European countries the same limitations are faced, though in Romania, Hungary and Bulgaria state-encouragement is resulting in a steady expansion in sheepmeat production. The general policy in East European countries is to expand meat output, but sheepmeats are often given lower priority than other types of meat. Also, it is rare that actual production achieves the levels "planned" by government.

South American sheep numbers have declined overall since 1960, especially in the main producing country, Argentina, though in Uruguay there was a revival in the industry in the late 1970's. The overall decline results from several factors, not least the political instability and economic uncertainty in the region. Other enterprises

have received greater encouragement (e.g. cereals, beef) and wool prices have declined; also, health and veterinary standards in the region are low, reducing efficiency. The latter has reduced demand for exports whereas the export trade was formerly a stimulus to production. More favourable world market conditions for grain and beef could further reduce the level of sheepmeat production in South America, so no expansion in the industry is expected.

In Africa sheep numbers and production have tended to increase, but in the major producing country (South Africa), they have declined slightly. The region is not a significant producer, and has little external trade in sheepmeats; major increases in output are unlikely (FAO 1979).

In Asia sheep numbers have been increasing in many countries, but especially in India, Pakistan and Turkey, due to the influence of rising sheepmeat prices. High priority has been given to the sheep industry in China by the Central Authority. Total output in the region is likely to continue to expand, despite frequent (but localised) periods of severe weather conditions.

Several countries in the Middle East, especially Iran, have expanded output and sheep numbers. Further expansion is likely, given the stimulus of growing demand, but is restricted in the short-term by institutional and structural factors, and in the long-term by the constraining physical factors.

In Oceania sheep numbers have been relatively stable. The fall in Australian numbers since 1960 has been offset by an overall increase in New Zealand. Relatively higher profitability of beef production, together with lower returns for fine wools, were major factors in the decline in Australia; recurrent droughts were also an important contributing factor. Profitability has therefore declined in recent years.

Sheep farmers in Australia rely heavily on fine wool prices and the domestic meat market so long-term recovery depends on relative meat prices and returns, on wool prices, and, to a lesser extent, on world mutton prices. Whilst the downward trend has been arrested, the prospects for growth beyond the 1970 sheep numbers in Australia is remote.

In New Zealand a decrease in sheep numbers occurred in the early 1970's; as profits from sheep enterprises fell, beef production increased, and there were several seasons of adverse weather. The fall, however, was less severe than in Australia and recovery quicker as the droughts were less severe; coarse wool prices tended to increase as the Government and the Wool Board intervened to support the market, and because lamb prices have been more favourable than mutton prices. Increasing and stable lamb prices guaranteed under the Government's Supplementary Minimum Price Scheme should encourage further expansion of the New Zealand sheep industry, particularly if accompanied by improved or stable prices for coarse wools.

### 2.3 Outlook for Production

From this brief analysis of production and stock trends, the conclusion is drawn that total world sheepmeat output is likely to expand somewhat during the 1980's. There are, however, constraints which will slow expansion (these are structural and social factors in Europe; social and political factors in Africa and the U.S.S.R.; and economic factors in the Americas and Oceania).

While sheep numbers and production may decline in some areas, an expansion in total sheep numbers should occur as a result of economic factors in New Zealand, Asia and marginally in the EEC, and because of political and economic factors in China, the U.S.S.R., and Eastern Europe. FAO (1979) projects world sheep and goat numbers to increase by 7% by 1985, and production by about 10%, due to heavier carcass weights, higher offtake rates and greater productivity. Production will be increasingly influenced by changes in sheepmeat prices relative to the prices of other meats, changes in wool prices, and in the growth in demand for sheepmeats, particularly in the new and developing markets. There are severe physical constraints on expansion, but with rising land values and feed costs there is likely to be a move towards greater utilisation of "marginal" land. Sheep are the most suitable livestock enterprise for these regions, and numbers could therefore expand (Regan, 1980).



### 3. CONSUMPTION

#### 3.1 General Trends: 1960-1980

Sheepmeats are consumed in most countries to some degree, but the level of consumption varies widely. Table 3 indicates total consumption in the main countries. Consumption patterns and attitudes are strongly influenced by traditional factors; in the vast majority of countries sheepmeats are not a traditional source of protein, and consumption is insignificant. In other countries consumption is sporadic, limited to festive occasions (such as Easter or Christmas), whilst a few countries (such as Australia and New Zealand) traditionally have high per capita consumption levels. Per capita consumption trends and levels in the main consuming countries are given in Table 4.

In spite of an increasing trend in red-meat consumption total world sheepmeat consumption has tended to decline due mainly to lower levels of production in recent years. The decline in consumption has occurred in those countries with traditionally high per capita consumption. However, partly offsetting this is the increase in demand in countries where incomes are rising rapidly, and where sheepmeats are being established as a new and special item in the diet. Consumer reactions to sheepmeat price and income changes vary widely : income elasticities range from -0.5 in Australia, to +0.6 in Japan, and own-price elasticities range from -0.57 in France, to -2.31 in Canada (FAO, 1976; Greenfield, 1974). Cross-price elasticity estimates imply that in the past demand for

sheepmeats has mainly been affected by beef prices (though not strongly), but that demand is becoming more responsive to relative price changes. Further discussion of factors affecting demand can be found elsewhere (Brabyn, 1978; Baron and Carpenter, 1976).

In many places distinct trends are seen in the pattern of demand for mutton and lamb. Mutton is often regarded as a cheap source of protein, or used for manufacturing sausages and hams. As a bulk, staple food, it tends to have a low price elasticity, and a low or negative income elasticity (i.e. it is considered an inferior food).

Lamb, on the other hand, tends to be highly price and income elastic (similar to veal), and is considered a high quality, luxury item. Lamb consumption is increasing therefore, whilst mutton consumption in many countries is falling.

### 3.2 Specific Trends in Consumption

#### 3.2.1 Countries with traditionally high levels of sheepmeat consumption

Consumption has declined recently in the countries with traditionally high levels of sheepmeat consumption (Australia, New Zealand, Greece, U.K.). Rising consumer purchasing power in these countries tends to be reflected in a change from sheepmeats to beef and veal, which have more luxury appeal : also, relative prices of pork and chicken have fallen considerably, making them attractive buys. Higher lamb prices and stable real incomes have constrained consumption of lamb, and mutton consumption in all these countries is declining, causing an overall decline in sheepmeat purchases.

TABLE 3  
Consumption of Sheepmeats in the Main Regions  
 (Kt)

	1960	1970	1975	1980*
U.S.S.R.	950	980	1,003	955
Australia	462	482	343	260
EEC (9)	860	821	817	803
Iran	152	226	332	415
Japan	49	223	253	272
Asia (other)	641	716	751	693
Africa	129	241	221	236
U.S.A.	419	303	197	155
East Europe	148	178	162	165
West Europe (non EEC)	255	327	335	330
<b>Total</b>	<b>4,540</b>	<b>5,097</b>	<b>4,898</b>	<b>4,725</b>

Source: USDA

(\* Preliminary)



TABLE 4  
Annual Per Capita Consumption of Sheepmeats  
In Various Countries

(kg)

	Average 1967-71	1975	1977	1980*
Australia	40	22	18	18
New Zealand	40	37	30	32
Greece	14	14	14	14
Ireland	11	11	10	9
U.K.	10	9	7	6
Iran	7	9	13	11
Argentina	6	4	3	3
U.S.S.R.	4	4	4	4
France	3	4	4	4
Canada	3	2	1	1
U.S.A.	2	1	1	0.5
Japan	2	2	2	2
Italy	1	1	2	2

(Source: Compiled from Table 4,  
and U.N. Demographic Yearbooks)

(\* Preliminary)

Another factor affecting the demand for sheepmeat as a staple food has been the increased demand for fast-foods, which have benefitted other meats more than sheepmeats.

In the longer-term, this declining trend in consumption in the traditional sheepmeat-eating countries can be expected to continue. It will be increasingly affected by changes in the relative prices of other meats, which are in turn affected by input (mainly grain) costs. The status of sheepmeats is likely to continue to change in these countries. Lamb will become more widely recognised and accepted as a luxury food, and as an alternative to other red meats, such as beef and pork. The decline in consumption of mutton as a table meat will more than offset this; use of mutton for manufacturing may increase though, depending on relative prices of alternatives, including synthetic substitutes.

### 3.2.2 Countries with low per capita sheepmeat consumption

Consumption in countries with low per-capita demand for sheepmeats have shown a somewhat different picture. In regions, such as the U.S.A. where production has declined, consumption has also fallen. In others (e.g. Italy, Brazil) consumption has remained stable, but in a few (the Middle East, Japan, France) consumption has risen. In these latter countries, where per capita consumption of all meats is high, most of the increased demand shows a shift towards lamb, whereas in countries where meat consumption is low, increasing quantities of mutton are also being purchased. In the countries where sheepmeats are consumed as a regular part of the diet, but at low levels, some expansion in demand will occur as incomes rise, though perhaps not to the levels experienced

in traditional consuming countries. There is evidence of this trend in Eastern Europe and the Middle East where increased oil returns have raised standards of living.

### 3.3 Outlook for Consumption

Thus, the outlook for sheepmeat consumption is that levels will continue to vary widely between countries. In the traditional markets the downward trend may continue, with a shift from mutton to lamb. In the low consumption countries a general expansion in demand can be expected as incomes rise, and as more of the produce becomes available in the form required (e.g. as quality "cuts" of lamb; or as fresh meat or live animals rather than frozen meat). These low-consumption countries account for by far the larger proportion of the world population, hence a small change in per capita consumption would have a significant effect on total demand.

FAO (1979) project that the world average per capita consumption of sheepmeats will remain the same (1.8 kg), to 1985, but that total demand will increase in line with production due to growing population, and that important regional shifts are likely to occur.

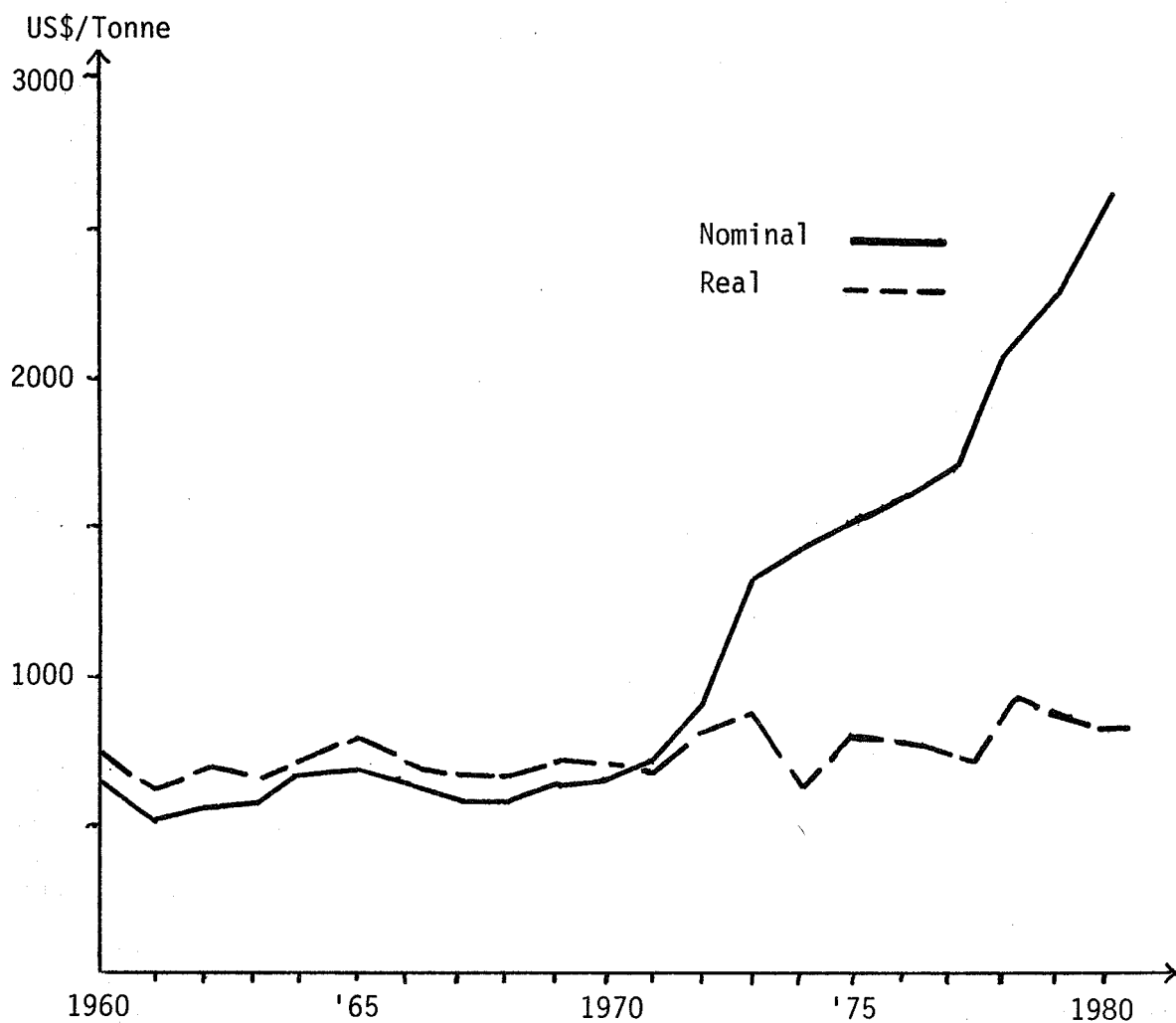
#### 4. SHEEPMEAT PRICES

Prices for sheepmeat fluctuate seasonally. Annual averages, however, have shown a dramatic increase since 1973. Prices almost doubled in that year, and apart from a fall in 1974/5 continued to increase up to 1980.

Prices in importing countries tend to be more unstable than those in exporting countries (OECD, 1979) and trade prices are more unstable than domestic prices, reflecting the residual nature of sheepmeat trade. Both mutton and lamb prices have shown similar trends, though mutton prices are generally more volatile, and have increased more over the period. Indices of actual export values show that in New Zealand, lamb prices have increased seven-fold and mutton prices ten-fold since 1960 (MAF (N.Z.), 1979). The average annual change in lamb prices was 9%, whilst it was 15% for mutton (with standard deviations of 16% and 27% respectively). Annual variations in lamb prices tend to be smaller than mutton, as most sales are concentrated between two main traders (New Zealand and the U.K.). Mutton prices, however, are affected by the irregular entrance into the market of the U.S.S.R., the Middle East and South Korea.

In real terms, sheepmeat prices have changed little. At constant 1970 prices, export and farmgate prices have actually declined, whilst import and retail prices have been stable or increased slightly. Figure 2 portrays the trends in nominal and real terms of a representative market price series (the Smithfield, U.K. price for New Zealand lamb) over the period 1960-1980.

FIGURE 2  
World Sheepmeat Prices



The level of sheepmeat prices in various countries show quite marked differences (price-series and international comparisons can be found elsewhere (NZMPB, 1977; FAO, Monthly Bulletins)). Part of the difference results from the short-term effects of exchange rate fluctuations, seasonality, internal market forces and market rigidities. In the longer-term, the differences reflect the costs of production

and transport, the imposition of trade restrictions (Section 5.4) and the form of the meat (e.g. live sheep, sides or cuts). Prices also reflect the quality of sheepmeat preferred (e.g. prime lamb, or mutton).

Frozen meat prices are generally much lower than prices for fresh and chilled meat which reflects the attitudes, tastes and preferences of consumers, the lower cost of transporting frozen meat, and the low production costs in countries supplying frozen meat. The difference between countries for frozen imported sheepmeat is much less than for the domestic product.

Prices for fresh domestic lamb tend to fluctuate seasonally, but overall, French prices are the highest, and New Zealand the lowest (amongst quoted series, at both wholesale and retail levels). In the EEC, the U.S., and Greece, prices tend to be higher than the U.K. In most cases the differences are widening, apart from within the EEC, where some levelling has taken place due to increased trade amongst member states. More details of prices are given under individual country analyses.



## 5. INTERNATIONAL TRADE

### 5.1 Introduction

International trade in sheepmeats is small; only about 10% (i.e. 800-900 Kt) of production enters world trade. Though this is a smaller absolute volume than for other red meats, as a proportion of production it is much larger. In the past, trade patterns have been determined by the seasonality of production, with trade flows generally from the southern to the northern hemisphere. New Zealand and the U.K. have always dominated trade, with over 70% of international sheepmeat trade taking place between them during the 1960's (Fig.3). Trade patterns have changed somewhat since then: total trade has increased 65% from 1960-80; New Zealand and Australia still dominate the market on the export side (Table 6), but many more countries now import large quantities of sheepmeats (Table 5, Fig.4). Also, carcass meat trade has grown at the expense of trade in live animals, as handling facilities have improved. Most sheepmeat entering international trade is frozen, and, as such, tends to obtain lower prices than the fresh product. Frozen mutton does not face the same problem, as its main end use is in manufacturing, or as cheap, bulk protein. Within the overall trade, distinct flows take place for lamb and mutton (Table 7) as is discussed here briefly.

### 5.2 Importing Regions

The EEC, in particular the United Kingdom, is the major importer of sheepmeats but the quantities imported by the United Kingdom have declined over 40% since the late



1950's; EEC (9) imports were 328 Kt in 1980. Frozen lamb imports still account for about half the United Kingdom consumption but mutton imports have become negligible. France is an important sheepmeat importer, with most of the imports being fresh or chilled lamb. Small quantities of frozen lamb are also imported, though most of the French imports are supplied by other EEC countries.

The second major sheepmeats importer is Japan, taking mostly mutton (over 260 Kt per annum) which is used in processed meat products. However, import demand has been highly irregular in the past few years, as a result of exchange rate fluctuations and competition from cheap pork. Japan also imports small quantities of frozen lamb, but because of consumer prejudices against sheepmeats, lamb consumption is insignificant.

Several other countries are consistent frozen lamb importers. However, for these countries (Canada, the United States and Greece) quantities imported are small in total as well as in relation to local production. These countries also import small quantities of mutton.

FIGURE 3

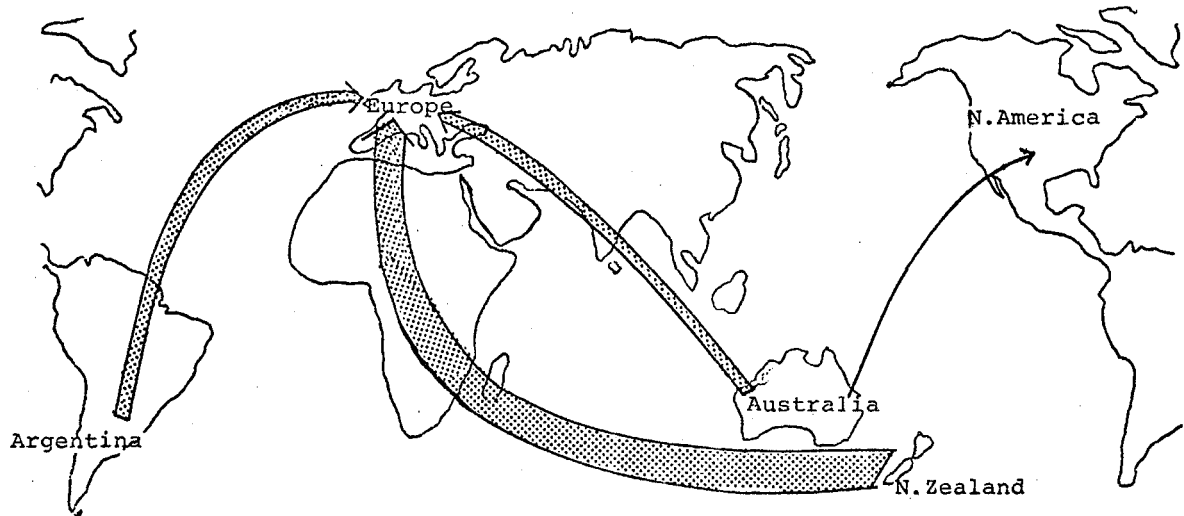
Major Sheepmeat Trade Flows: 1960

FIGURE 4

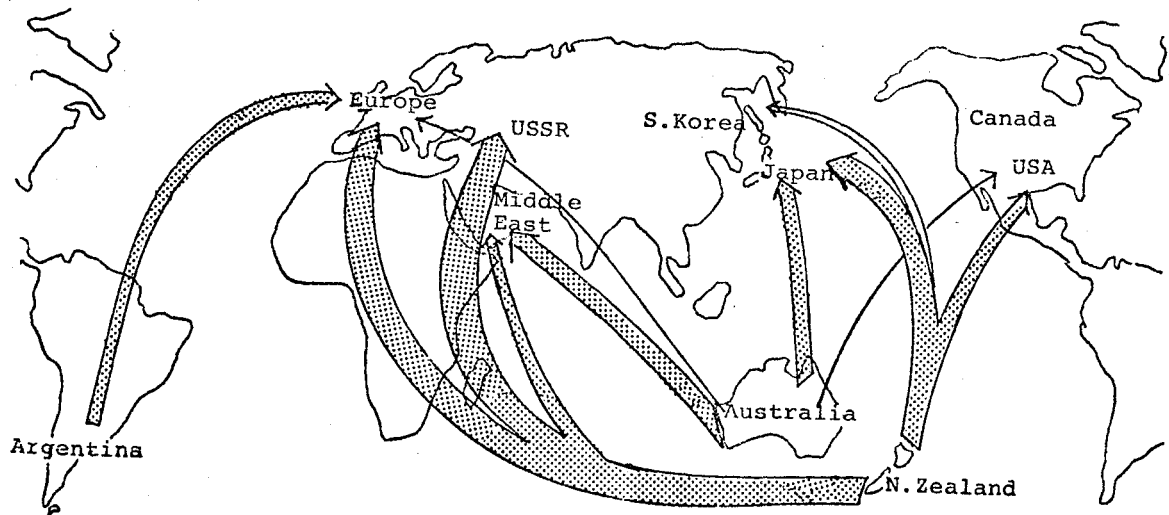
Major Sheepmeat Trade Flows: 1980

TABLE 5  
Imports of Sheepmeat

(Kt)

	1960	1970	1975	1980*
U.K.	375	338	247	220
Other EEC	10	50	96	108
Japan	45	222	261	260
Iran	0	15	38	65
U.S.S.R.	0	28	77	100
North America	61	92	33	45
Other	65	68	32	69
World	538	813	784	867

Source: USDA

(\* Preliminary)

During the 1970's a number of new sheepmeat importers have emerged. The U.S.S.R. has become an important but unpredictable importer of frozen mutton. The entrance of the U.S.S.R. into the mutton trade has reduced the dominance of Japan and, as a consequence, world mutton prices have risen significantly. However, the greatest and most sustained growth in sheepmeat imports has occurred in the Middle East, where several countries have become major importers since the rise in world oil prices. Initial imports involved substantial quantities of mutton and live sheep but more recently demand has shifted to lamb. The major market in this region is Iran, though Iraq and Saudi Arabia also purchase significant quantities; the political instability in the region raises questions as to the stability of trade.

South Korea has also emerged recently as an important sheepmeat importer. A large proportion of the sheepmeat importation is mutton carcasses for boning, processing and for re-exporting to Japan, and little is consumed domestically.

Many other countries import minor quantities of sheepmeats on a regular basis, in some cases to meet a highly specialised or localised demand. They account, however, for only a small volume of total trade.

### 5.3 Exporting Regions

The major sheepmeat exporters are New Zealand and Australia (Table 6). Competition in sheepmeats between the two countries is limited to the extent that each specialises in different products (Table 7) and they tend to service different markets (NZMPB, 1977).

New Zealand's major sheepmeat export is lamb, with the EEC, and in particular the United Kingdom, being the major importer. The proportion of New Zealand lamb being exported to the United Kingdom has declined from over 90% in the early 1960's to less than 65% in the mid-1970's. Other EEC countries take small but increasing quantities and in value terms constitute important markets. Other markets for New Zealand lamb are the United States, Canada, Japan, Greece and the Middle East countries. All of these markets have taken steadily increasing quantities of lamb from New Zealand but the greatest growth has occurred in the Middle East countries, Iran and Iraq, and long-term contracts have been negotiated with both countries in the past.

New Zealand also exports considerable quantities of mutton to Japan and more recently to the U.S.S.R. but on an irregular basis. Although the quantities of mutton going to the EEC (predominantly the U.K.) have declined, it remains a significant market. New Zealand's total exports have expanded rapidly, especially in the late 1970's, to 445 Kt in 1980.

Australia's major sheepmeat export is mutton and the most important trade link is with Japan. The United States, Canada and the United Kingdom have declined in importance, but in recent years the Middle East countries, and occasionally the U.S.S.R., have taken significant quantities of Australian mutton.

Australia also exports substantial quantities of lamb to the Middle East and, in particular, Iran. In the past, Australia has exported lamb to the United Kingdom, the U.S.A. and Canada but this trade has declined as the Middle-Eastern markets have emerged facilitated by Australia's proximity to these new markets. Total Australian exports have doubled over the period 1960-80, and were 253 Kt in 1980.

Australia is the world's major exporter of live sheep and in 1980 exported 5.4 million live sheep to the Middle East. This is equivalent to over 100 Kt of sheepmeat.

The other major southern hemisphere exporter is Argentina, though exports have declined considerably as a result of falling production and the prevalence of Foot and Mouth disease. Lamb is the major sheepmeat exported and the EEC is the major importer of Argentine lamb. In particular, West Germany takes over 50% of Argentina's sheepmeat exports in bone-out form, for veterinary reasons. Spain and Greece were formerly important markets, but quantities to these markets in recent years have declined due to shortage of supply. The Middle East has not emerged as an important sheepmeat market for Argentina and exports to countries in the region have actually declined. Total exports from Argentina have declined from 43 Kt in 1970, to only 15 Kt in 1980.

Trade flows in the northern hemisphere are dominated by Intra-Community trade within the EEC. Although the United Kingdom is a substantial net importer of sheepmeats, it sends some chilled lamb to France and smaller quantities to other EEC countries (around 40 Kt in total).

TABLE 6  
Exports of Sheepmeats

(Kt)

	1960	1970	1975	1980*
Australia	126	282	194	253
N.Z.	345	438	402	445
Argentina	40	43	27	15
U.K.	0	10	33	40
Other	27	58	80	114
World	538	831	736	867

Source: USDA

(\* Preliminary)

TABLE 7

Lamb and Mutton Trade

(Kt)

		1974	1978	1979
<u>EXPORTS</u>				
Australia	- mutton	67	167	117
	- lamb	14	46	48
New Zealand	- mutton	111	75	116
	- lamb	251	304	320
<u>IMPORTS</u>				
U.K.	- mutton	7	19	6
	- lamb	205	207	202
Japan	- mutton	90	140	118
U.S.S.R.	- mutton	21	61	1
Iran	- lamb	19	86	74

Source: Bureau of Agricultural  
Economics  
Meat Situation & Outlook



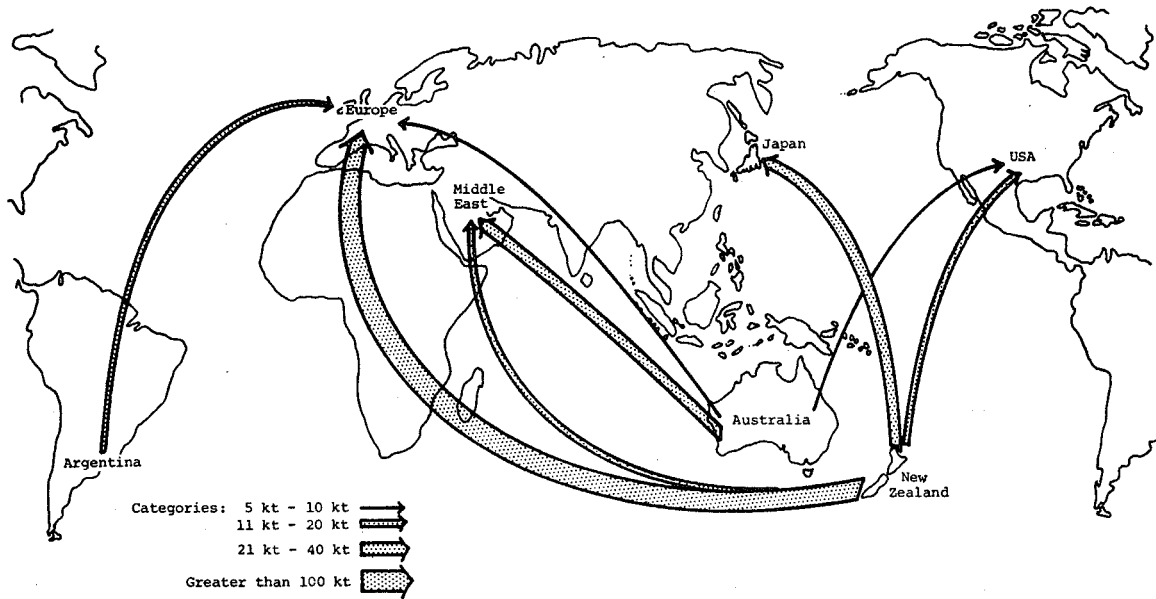
The Netherlands and Ireland are both net exporters to other EEC countries and other intra-EEC trade in sheepmeat is important, though the flows have changed somewhat since the introduction of the EEC sheepmeat regime (Blyth, 1981).

In terms of the quantities traded between European countries, several East European countries export significant quantities of sheepmeats and live sheep to the EEC. In addition, a large and growing proportion of live sheep are exported for slaughter to the Middle East and North Africa. Total sheepmeat exports from the region were 27.4 Kt in 1980.

The major world trade flows of lamb and mutton are depicted in Figures 5 and 6.

FIGURE 5

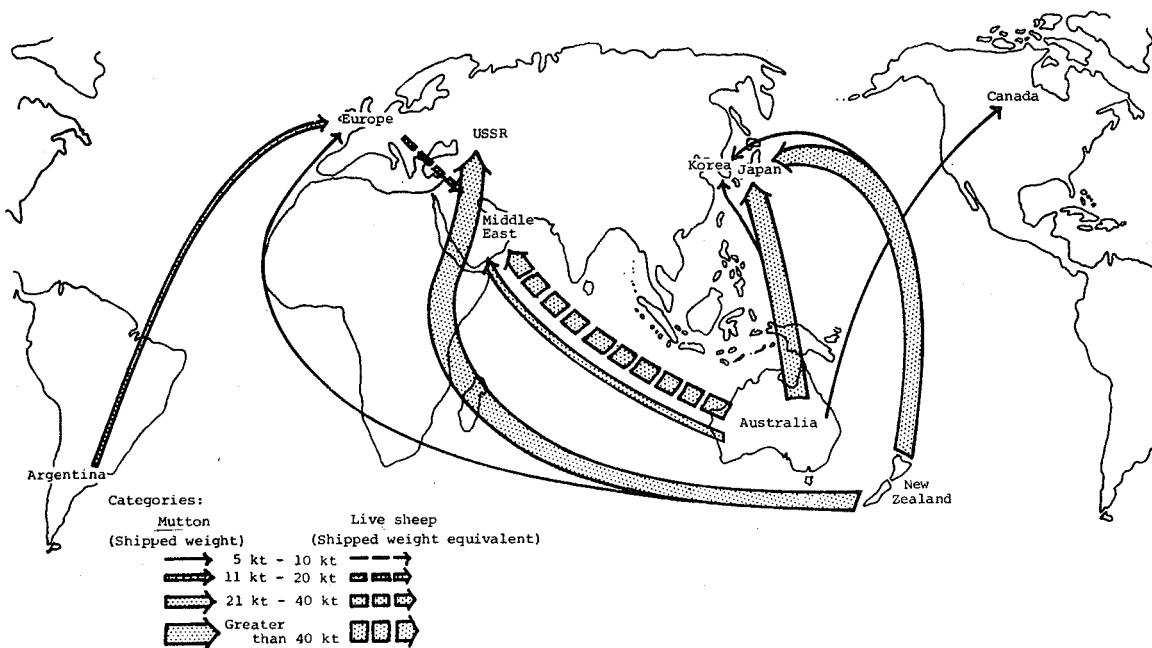
Major Lamb Trade Flows



Source: BAE (1978)

FIGURE 6

Major Mutton Trade Flows



Source: BAE (1978)

#### 5.4 Restrictions to Free Trade

International trade in sheepmeats has been less subject to trade barriers than other livestock products (such as beef and dairy exports). This is possibly because of the localised patterns of production and consumption, and the resultant concentration of trade-flows. The complementarity of production between the northern and southern hemispheres makes it advantageous for these regions to trade.

In most countries, tariffs on sheepmeat have been low, though stringent health regulations and complex import licensing systems are frequently applied. As trade has increased, barriers to trade have also increased somewhat (NZMPB Annual Reports list regulations imposed by individual countries).

The EEC, the major sheepmeat importer, imposed a Common External Tariff (CET) at the rate of 20% on sheepmeat and 15% on live sheep for slaughter up to 1980. Thereafter the tariff was reduced to 10% as part of a trade agreement. This tariff, which is bound under the General Agreement on Tariff and Trade (GATT) rules, has been the main impediment to sheepmeat imports into the EEC. However, individual member states (notably France) have in the past supplemented the CET with various national measures including both additional levies and quantitative restrictions. These applied to both other member states, and third countries, but most of the restrictions have now been replaced by a Common Market Regime. The EEC introduced the common regime for sheepmeats in 1980. It

is based on a system of market support through intervention buying and deficiency payments, with protection from imports through a CET of 10%, and "voluntary" restraints from exporters (details can be found in Blyth, 1980; Volans, 1981). The support systems, the transition period and the agreements with 3rd countries are likely to have a significant effect on both the internal, EEC, and the world market (Blyth, 1981) as high producer prices encourage domestic supply and as the demand for imports is reduced.

Some European countries impose severely restrictive levies on imports (e.g. Sweden); others apply quantitative restrictions (e.g. Switzerland). Many other European countries require import licences to be issued by a Central Authority. The licences may or may not be freely available depending on the market state of the particular country. In the U.S.A., low rates of duty are applied, and a global import quota theoretically restricts all meat trade, with a base limit for each exporting country. In practice, this "voluntary" restriction has not been implemented for sheepmeats, and there is a growing demand by U.S. producers for the introduction of a specific quota, over and above the "countervailing duty" of 6% imposed on N.Z. lamb imports in 1981.

The Middle East markets are mostly duty-free, but Iran and Iraq operate systems of controlled state purchasing (see NZMPB (1977) for details). In several other countries such as Spain, Portugal, Libya and Syria, the central authorities periodically let tenders for specific quantities of sheepmeat. The Greek authorities formerly required price approval before import licences were issued, but domestic price

controls have now been lifted. Many Middle Eastern countries (e.g. Saudi Arabia, Iran) subsidise meat sales to keep consumer prices low.

One of the few countries to have virtually unrestricted access for sheepmeat is Japan. East European countries also apply no direct tariff on imports, though access is controlled by the system of state purchasing and an indirect duty is levied on the margin between the c.i.f. and retail price.

Some of the main restrictions on sheepmeat trade are in the form of non-tariff barriers, such as import licensing, as discussed above, and restrictive health regulations. The EEC (Third Country Veterinary Directive) and the U.S.A. (Wholesome Meat Act) provide the greatest hygiene constraints on sheepmeat trade; many other countries (e.g. Japan, Eastern Europe, and the Middle East) accept the conditions imposed by either the U.S. or the EEC, but do not always insist on compliance.

The exporting region to be worst affected by health restrictions is South America (especially Argentina). Exports from Argentina are banned totally from the U.K., the U.S., and Japan, and as bone-in meat from many other countries. The restraint has been avoided partially by selling bone-out (which tends to be more profitable anyway) in growing markets such as West Germany and Greece.

On the export side there are few direct distortions to trade. The main one has been New Zealand's Export Diversification Scheme, intended to reduce dependence on the U.K. market. Few Governments have found it necessary

to subsidise exports, but in several countries indirect subsidies are paid on production or on sheep farm incomes, or tax incentives are given for exports of sheepmeat. Only in East European countries do the Governments have total control of both the quantities and the terms of export transactions; most other countries have Producer Boards which are usually autonomous, but regulated by various Government statutes. The New Zealand Meat Producers' Board (NZMPB) for example, has a total monopoly in some markets, and regulates trade strictly in others by issuing licences for private trade. They also have important domestic functions, relating (in particular) to the distribution of export prices and receipts (Lloyd, 1980).

Formal, multi-national agreements on sheepmeat trade are however, virtually non-existent. Of course, under the GATT, importing countries can only impose or increase quantitative restrictions in exceptional circumstances, and then it must accord 'Most-favoured-nation' status to all traders. (The EEC is bound by a special arrangement under GATT, allowing it to impose the CET on sheepmeat.) GATT, however, has no control over restrictions imposed on the grounds of hygiene.

In their quest for long-term, stable markets, many countries have formed bi-lateral arrangements. Often the agreements are aimed at ensuring the imports are marketed in such a way as to complement rather than compete with local production. An example is the Lamb Promotion Co-ordination Committee established in the U.S.A., between U.S.A. producers and those in New Zealand and Australia. Similarly, in France, a partnership between French and

New Zealand producers (FRANZIM) acts as the sole agent for New Zealand lamb and mutton imported into France under the global quota system.

Other major impediments to free-trade are the preferential trading agreements made within trading blocs, especially the EEC and East Europe. Trade restrictions have given greater stability to those traders who have negotiated trade agreements. For those who trade on the residual "world" market, prices are highly volatile, though not to the extent of other commodities (see the OECD (1979) for a study of instability in the world meat markets).

In general though, trade agreements in the sheep-meat market do not involve governments of the countries concerned. They reflect the increasing awareness amongst exporters of political issues affecting sheep farmers in importing countries, and the need to maintain access, without disrupting markets. Market management has generally been left in the hands of the trade, with some organised intervention by producers and by exporters. Much of the trade is undertaken by multi-national companies which have both processing and retailing facilities. Moreover, an increase in contract sales between export freezing works and importing supermarkets has also reduced the importance of wholesale markets such as Smithfield, U.K. The Smithfield market nevertheless, continues to provide a barometer for the general market situation and to handle the bulk of the frozen carcass meat trade.

## 5.5 The Outlook for Trade

Current trends in production and consumption have already had a considerable impact on patterns of trade in sheepmeat and these changes are likely to continue.

FAO (1979) predict that trade will increase by 66% by 1985, to 1,400 Kt. The growth in trade will be mainly between New Zealand and Australia, and the Middle East. Eastern Europe and some of the developing export countries in Africa, Latin America and Asia are also expected to benefit from the growing import demand for sheep and goat meat in the OPEC countries. Net import requirements of the EEC are projected to decrease (though intra-EEC flows may increase) as a result of high tariff barriers, import quotas, and high internal prices. Imports in many other, smaller markets, such as Japan, the U.S.A., Greece and Singapore are projected to rise.





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