maritime insurance was introduced and premiums were fixed likewise, and partnership agreements came into being. Gradually a vibrant commercial society grew up in Venice which embraced not just the oligarchy of merchants that governed this trading state but the entire bulk of the citizenry as well. Shipping and commercial lists that have survived to this day bear testimony to this fact.

Yet it has been pointed out that the nature of credit available in Venice was sporadic. One of the major weaknesses of the Venetian economy was its failure to create a stable system of credit. The sixteenth century did see the rise of some banking families in Venice—the Tiepolos, the Pisanis and the Priulis. But once the Levant trade diminished these firms went bankrupt. Between 1560 and 1580 all major banking firms in Venice crashed and only one of them managed to pay their creditors in full.

Apart from Venice the Florentines managed to build a strong financial centre in Lyons thanks to the patronage of the French monarchy. By 1470 the Medicis had set up two banks at Lyons. But it should be noted that the Florentines withdrew from commercial credit at this time and contented themselves with being creditors to the courts of Europe.

Actually the nature of financial investments was undergoing a change in the fifteenth century. A new type of speculative financial venture was now needed by the European economy. As Portugal and Spain embarked on their voyages of 'discovery' and exploration a new kind of financier was needed by the European economy–one who would combine the attributes of both a gambler and a visionary. No longer was the old type of financier sufficient for the emerging Europe; it was to be the new breed of financiers who would henceforth chart the changing map of the world and guide the destinies of European states. These financiers were the south German financiers.

Chapter 4

THE SIXTEENTH CENTURY

The sixteenth century in Europe has been called 'the long sixteenth century' (**Braudel**) for the century witnessed an expansion which lasted well until the early decades of the seventeenth century. The sixteenth century saw the last phase of growth within the formal feudal framework : agriculture and trade boomed ; scientific revolutions ensured Europe's primacy in world affairs in future ; more and more previously uncharted areas of the world came under European hegemony ; finance became even more dynamic and mobile ; the old pattern of manufacturing broke down as newer manufacturing units sprang up to accommodate the demands of the truly international market that new emerged and a veritable European world system based upon capitalist agriculture became the hall mark of the sixteenth century.

We have mentioned that these changes, which decided the future paths of transformation of the various European economies, occurred within the feudal framework. We should keep in mind however that it was in this very century that the feudal economy was dealt the final blow which paved the way for a genuine capitalist transformation in Europe. The social consequences of the decline of feudalism and the attendant rise of proto capitalist relations was the rise and consolidation of the bourgeoisie that had been in the making for some time in Europe. The result was that the social fabric was shattered and new classes with a different world view now occupied a central place in Europe.

4.1 Agriculture in the Sixteenth Century

The long and sustained expansion of the sixteenth century was visible most in European agriculture. The spirit of this age of change can be found in : 1 improved agrarian techniques which resulted in increased productivity of the soil 2 a simultaneous price rise in grain which has been called a 'price revolution' by some historians and thereby generated a debate as to the factors (external trade or technological advances in agrarian management) behind it 3 a consequent 'commercialization' of agriculture as land became a valuable economic commodity 4 a resultant entry of market relations, the breakdown of feudal relations and the rise of a market economy in west Europe and finally 5 a 'refeudalisation' in eastern and central Europe which now undertook to supply the proto capitalist west Europe with much of the foodstuff and livestock needed there. This measure annihilated the internal economies of the countries of eastern and central Europe and retarded both the emergence of a strong state and capitalist relations in that part of Europe. The main lines of inequality between the west and the east were thus first drawn in the sixteenth century.

In a way this long 'boom' of the sixteenth century also spelt the end of the Mediterranean as the centre of European culture and economy as the Mediterranean countries could not readjust to the modifications and reorganizations demanded by the nature of the changing European economy. This favoured more the northwestern and Atlantic economies. These were better situated to benefit the most from this transformation.

The sixteenth century, therefore, was the period of a very definite transition which contained within itself the seeds of the capitalist economy. And this capitalist economy manifested itself first with the rise of capitalist agriculture.

4.1.1 Changed Agrarian Techniques

The sixteenth century saw a long and steady population expansion. There were considerably fewer wars and epidemics in the sixteenth century which helped sustain this population rise. The result was an upward swing in agriculture all over Europe and this in turn meant that an expansion of cultivation occurred as more and more lands were brought under cultivation, forests were cleared, marshes were drained and pastures converted to arable land. All along the countries fronting the North Sea drainage systems were undertaken and dykes were constructed ; it is estimated that in the Low Countries alone some 44 000 hectares were reclaimed from the sea between 1565 and 1615. The Netherlands thereby increased their surface area by nearly 30%.

Apart from expansion of cultivation there also occurred simultaneously an intensification of cultivation all over Europe to accommodate this ever rising population. Certain agricultural techniques and concepts of land management came into play in sixteenth century Europe. They were : 1 crop rotation of several courses with the fallow relegated to the fourth year to improve the

quality of the soil, 2 regulated convertible husbandry with two years of grain cultivation succeeded by a fallow year followed by three to six years of grazing and 3 crop rotation with fodder crops being grown in the fallow year. These measures improved the quality of the soil.

Intensification of farming in sixteenth century Europe had two very important consequences. One was that for the last time in feudal Europe agriculture used technology which greatly increased the output of grain. The second was that the methods used in intensive cultivation required both specialist knowledge and efficient farm management. The result was that a class of professionals now came into being who were well versed in both agrarian techniques and management.

Each country followed either expansion or intensive cultivation. In general the trend was towards expansion rather than intensification but intensification reached its peak in the Netherlands, in the Po Valley in northern Italy and in England–areas of considerable manufacturing activity–where land was at a premium. In other parts of Europe, notably in France, the Germanic area and Spain also, there was a shift from stock farming in favour of grain cultivation. In fact in Spain the powerful wool lobby, the Mesta, lost out to the grain lobby and Spain thereby lost a major part of her export earnings from wool.

Each country followed its own variant of the three fold intensive system of agriculture ; each type being suited to that country's specific needs and structure. It has to be borne in mind that the course followed by each country and the relative strengths of the three tiered class structure of the state, the lords and the peasants within the economic system determined the future path of development that country undertook. This is why we regard the agrarian changes of the sixteenth century as the forerunner of the modern capitalist system.

4.2 The 'Price Revolution' of the sixteenth century

Rising population alone cannot provide us with the answers to this changed agricultural picture in the sixteenth century. Why was it suddenly so vital for all European countries to switch to grain farming? The answer lies in what has been conventionally referred to as the Price Revolution of the sixteenth century.

For reasons that will be discussed later there occurred a large demand for, and consequently a high price of, grain in sixteenth century Europe. The hallmarks of this Price Revolution were 1 a rise in grain prices 2 a general inflation although prices of manufactured goods did not rise as steeply as did grain prices 3 a consequent rise in rents attended by the appearance of commercial rents and speculation 4 the changeover of the nature of land from a mere holding to a marketable commodity and 5 the appearance of a rural bourgeoisie in the sixteenth century (**Emmanuel Le Roy Ladurie**).

Leasing of land, farming of revenue, ever rising land prices and speculation in real state became the hall marks of the period. A consequence of this price revolution was that capital was now taken out of the commercial sector and invested in land. Throughout Europe urban capital was invested in land-banking families such as the Welsers and Fuggers of south Germany, mine owners, merchants, cloth manufacturers and even university teachers and bureaucrats invested in land. Soon minor tradesmen and artisans also realized that land was a valuable commodity and they too started buying land

In fact the practice became so widespread throughout Europe that in England a petition was presented to Henry VIII complaining that people of 'lowly professions' such as clothmakers, goldsmiths, butchers and tanners were daily buying land and endangering the character and stability of rural England.

We see therefore that the 'Price Revolution' of the sixteenth century irrevocably changed the face of rural Europe.

4.2.1 Was there at all a 'Price Revolution'?

Generations of historians and social commentators have discussed the possible causes behind this rise in prices and this in turn has generated a lively controversy about the 'Price Revolution'.

The years from 1500 to 1620 referred to as the 'age of the Price Revolution'. It was first **Bodin** in 1568 who sought to give a satisfactory explanation of the sudden rise in prices. According to **Bodin** the inflation was caused by too much money in circulation in sixteenth century Europe. This excess money, said **Bodin**, came from Spain's 'discovery' and conquest of South America. The large amounts of gold and silver that the Spaniards plundered and later mined in

central and southern America and the fruits of the pillage of the Inca and the Aztec empires, were shipped back by Spain and distributed all over Europe. While this undoubtedly made Spain the most formidable European power it also had the effect of causing inflation within Europe. Geographical discoveries and the attendant rise of early colonial empires therefore influenced decisively the European economy in the sixteenth century.

The 'bullion' theory of **Bodin** was taken up once again in the twentieth century by **Hamilton** who reiterated Bodin's view that excess money in circulation affected rising prices in Europe.

But this theory was seriously challenged by **Cipolla** who felt that the term "Price Revolution" was exaggerated and in fact a misnomer as the rate of inflation on grain was about 1.4% per annum and therefore pretty negligible by modern standards. Also the researches undertaken by **Pierre** and **Huguette Chaunu**, the works of **Vilar** and **Magalhaes-Godinho** prove conclusively that the rise in scale was negligible. In fact large amounts of bullion flooded Europe only after 1550. We get the following statistics on figures and years for the bullion reaching Europe (condensed from Chaunu) : 1531-1540 —236.3 tons of silver and gold 1551-1560—755.5 tons ; and 1591-1600—3093.9 tons of bullion. We see therefore that substantial amounts of bullion only began to flow into Europe from the mid sixteenth century.

Countering this agreement **Hamilton** proposed that there were already considerable amounts of silver mined in Europe (in Tyrol and Saxony) between 1470 and 1490 and that the mines in Bohemia became active from around 1516. Therefore, **Hamilton** postulated, there was a considerable amount of bullion already present in Europe before the influx of metals from south America. People who previously hoarded money now began to exchange it for goods and once money entered the sphere of circulation, the inflow of South American metals triggered off an inflation that Europe could not control. **Keynes**, **Braudel** and **Spooner** also inclined to this view. They therefore thought in terms of a surplus profit rather than a price revolution.

Nef contributed a variant of this theory. He felt that this excess inflation occurred through greater opportunities for investment and innovations in technique and organization and less from cheaper labour. **Nef** felt that the decline of wages during the sixteenth century had been greatly exaggerated.

Kriedte and **Abel** felt that the import of special metals was only a secondary factor in contributing to the price rise. They were of the opinion that as population rose the demand for foodstuffs, and hence their prices, was bound to go up. For them therefore demographic changes in the sixteenth century was the single most important factor for the price rise of the sixteenth century.

However there is no doubt that once Spanish American metals entered the European economy inflation increased in velocity. Credit facilities greatly expanded at this time and interest rates fell (**Cipolla**).

Cipolla presents a composite explanation of the inflation of the sixteenth century. He traces the inflation to the frequent debasements of currency practiced by the European states in the fifteenth century. The main causes of the debasement of the metallic content in the coinage was due, according to him, to the following factors– comparative shortage of bullion in fifteenth century Europe, the advent of monetisation which made debasements necessary, increase in government expenditure mainly for army and other needs of the early modern state, the pressures exerted by social groups interested in inflation (the bourgeoisie), and deficits in the balance of payments. And when debasements were practiced to finance budgetary deficits they led to a drop in the value of money and inflation. To these factors **Cipolla** added the twin factors of the growing import of precious metals as well as a rising population in activating a price rise the likes of which had not been experienced in feudal Europe.

In retrospect we may safely say that the 'Price Revolution' although not a revolution in the context of the twentieth century fostered inflation and brought in changes that was to change the social and economic map of Europe. The 'long sixteenth century' ushered in the modern age in Europe.

4.3 The Commercialisation of