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UNEMPLOYMENT TODAY IN THE LIGHT OF MALINVAUD'S THEORY

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Unemployment Today in the light of Malinvaud's theory

Abstract

An important contribution by Malinvaud presents a theory of unemployment not sufficiently considered by modern macroeconomics. This paper employs his theory to explain some features of contemporary unemployment with special reference to Italy. Empirical evidence appears to be in line with the theory.

Introduction

After two decades of almost full employment, since the early 1970s unemployment has been rapidly rising in most Western European countries. The trend of unemployment follows the economic cycle in an asymmetric way: when economic activity slows down, unemployment increases; when economic activity accelerates, unemployment rate declines very little. This persistence of unemployment is a challenge for economic theory, and there is still insufficient consensus on the origin of the phenomenon.

According to Neoclassical and New Classical Macroeconomics, employment is determined by labour demand and supply and real wages are flexible and determined in a competitive labour market. This is a process which ensures that there is no permanent involuntary unemployment. The idea that involuntary unemployment cannot be a persistent phenomenon, however, conflicts with the empirical evidence.

The proponents of 'New Keynesian Macroeconomics' argue that the optimizing behaviour of agents (households and firms) cause rigidities in the real wage that may persist in the long run, so that the labour market cannot reach a full employment equilibrium. The reference here is to the literature on efficiency wages, insiders-outsiders, implicit contracts, and in general to approaches that consider unemployment to be a

consequence of wage rigidities. This literature combines the Keynesian definition of involuntary unemployment with the classical theory that restricts analysis of unemployment to the labour market. The wage rigidities explanation has undoubtedly made an important contribution to knowledge about the phenomenon, but it does not give an adequate account of unemployment. Such theories do not in fact belong to the Keynesian tradition, because they seek explanations of unemployment through analysis of partial equilibrium in the labour market. In this approach the wage is the crucial variable that determines the employment level, whereas according to Keynes, involuntary unemployment is due to a deficiency in effective demand.¹

Another line of inquiry prompted by Keynes' work consists of disequilibrium theories, also called (more correctly in my opinion) equilibrium theories with rationing. This approach comes closer to Keynes' theory of employment than does that of economists, namely the New Keynesians, who consider unemployment to be due to wage rigidity. Disequilibrium theories were first developed by Clower (1965) and Leijonhufvud (1967 and 1968), who reinterpreted Keynes' theory to focus on the interdependence of markets and the lack of coordination among them.² According to these authors, the absence of the auctioneer implies that information failures may induce a situation of non-Walrasian equilibrium in the economy. The existence of equilibrium with rationing depends on the distinction between effective demand and notional demand. Effective demand is generated by the current level of employment; notional demand is the demand that would exist if there were no rationing; that is, if the unemployed were able to work. But the potential demand of the unemployed is not effective demand. The signal of the existence of potential demand is not transmitted to firms, so that they do not hire unemployed workers;

¹ This approach refers to Keynes and attributes to him the idea that unemployment is due to wage rigidities. In actual fact Keynes, when referring to historical experience, observes that workers oppose the reduction of monetary wages, but they accept reductions of real wages when they arise because of an increase in the price level.

² Also Patinkin (1965) envisages elements of disequilibrium, which arise from the dynamic process of adjustment of the economic system, but in Patinkin's theory disequilibrium is not a permanent phenomenon.

and as a consequence the effective level of production is lower than the potential one. The discrepancy between effective and notional demand arises from the decisional dualism.

Since the 1970s the disequilibrium approach has been developed in different directions. The basic idea is that there are factors in the economy which preclude convergence towards full employment equilibrium owing to general problems of market failures, not to failures peculiar to the labour market. The absence of the auctioneer requires the introduction of specific hypotheses concerning the market structure and the behaviour of agents.

Malinvaud's approach to unemployment

Malinvaud's approach is one of the most interesting contributions to the theories of equilibrium with rationing. Since the mid-1970s Malinvaud has endeavoured to diagnose the macroeconomic causes of unemployment and to highlight economic policies with which to reduce unemployment. Malinvaud is not only a sophisticated theoretician, he is also directly involved in contemporary problems as a policy adviser and government statistician. He studied in the 1930s, during the Great Depression; consequently – as he writes in the preface to the Italian edition (1986) of *Mass Unemployment* – he was concerned with the unemployment problem even before he found his vocation as an economist. Since the 1970s high unemployment has once again become the main problem for economic theory and diagnosis. Malinvaud points out that there is little consensus on the causes of the problem and the remedies for it, but economists “behave as if they no longer believe they can do much about it”,³ and he strongly criticizes the attitude of economists who do not take the challenge seriously.⁴ Malinvaud rejects the

³ Malinvaud (1984) page 1.

⁴ “But since economists are human beings they sometimes adopt attitudes that permit them to avoid the challenge. Among those attitudes the least objectionable is to give up and remain silent. Indeed, some of my colleagues consider that as economists we understand the phenomenon of mass unemployment too poorly to say anything at all about it to our fellow citizens. Some even think that we cannot make any significant progress in our understanding of the phenomenon and so they work on other, academically more rewarding

New Classical approach, with its denial of the existence of involuntary unemployment, and at the same time he stresses that Keynes' analysis which inspired macroeconomic policies in the 1950s and 1960s is incomplete and does not deal with certain phenomena which have grown increasingly important since then.⁵

Malinvaud develops an innovative theory in his first and best-known book on unemployment (1977). Unfortunately, his contribution has not received the attention that it deserves. Very few macroeconomics textbooks consider his approach, and when they do so, he is often cited for his contribution to the economic debate on the effect of a change in real wage on employment. Malinvaud, in fact, examines the question of whether a rise in real wages would increase or lower unemployment, showing that it depends on the characteristics of the initial temporary equilibrium. Yet, as we will see, his theory amounts much more than this.

According to Malinvaud, the first step in addressing mass unemployment is to conduct a precise diagnosis; but unemployment has more than one possible origin, and its solution depends on the causes that have generated it. Economists and policy makers should keep this approach in mind, rather recommending standard prescriptions merely because they have been successful in different situations and in other countries. Malinvaud is profoundly convinced that public intervention is necessary in the modern market economies; without it, the economy may become indefinitely trapped in a situation of underemployment.

As a public advisor, Malinvaud has no ideological prejudices. He considers unemployment to be the greatest of social problems because it affects the whole of

subjects. A different attitude is to deny the phenomenon and to argue, for instance, that, since any mutual advantageous move had to be made in our society by those benefiting for it, malfunctionings cannot occur and involuntary unemployment, therefore, does not exist. Still another attitude is to become charlatans and to advertise a simple remedy, for instance a fixed monetary rule, a so-called 'supply-side' medicine or a protectionist package, the media being, as always, ready to contribute to giving such remedies favourable publicity at least as long as they look new". Malinvaud (1984) page 54-55.

⁵ See Malinvaud (1978).

society, the consequence being that he analyzes possible solutions with an open frame of mind. According to the causes and the magnitude of unemployment, he proposes such measures as a reduction of working time, early retirement, wage moderation, Keynesian policies, reform of the fiscal system; and for each of these proposals he analyzes its positive and negative aspects in the short and the long run.

The most important elements that characterize his approach can be summarized as follows:

- Mass unemployment is a disequilibrium that reveals an excess of labour supply; it should consequently be analyzed within the framework of a disequilibrium theory.
- Unemployment has more than one origin. There are two different kinds of unemployment: Keynesian unemployment (induced by a lack of effective demand) and classical unemployment (induced by a lack of productive capacity).
- The two types of unemployment can coexist in the same economic system. As a consequence, unemployment should be analyzed both at a general level and by disaggregating the economy in macro-sectors according to the type of unemployment affecting them.
- Policies to fight unemployment must be devised according to its origin. If classical and Keynesian unemployment coexist in the same economy, policies must take this fact into account.
- Involuntary unemployment tends to last in the long run: there are no automatic mechanisms that generate full employment equilibrium.

Malinvaud's approach to disequilibrium theory

Malinvaud rejects a partial equilibrium analysis of unemployment which considers the labour market in isolation. He does so because the performance of the labour market has effects and counter-effects on the rest of the economic system. He considers general

equilibrium analysis to be the proper approach with which to study unemployment, but he emphasises that “a general equilibrium is an abstract construct, that has no logical obligation to assume equality between supply and demand”⁶. Therefore the framework within which he analyses unemployment is not an equilibrium with full market clearing and where involuntary unemployment cannot exist; rather, he uses a specific concept of equilibrium grounded on the notion that demands may differ from supplies. Most economists prefer to refer to this situation as a “disequilibrium”; Malinvaud (1977) calls it an “equilibrium with rationing”.⁷

The concept of an equilibrium with rationing implies a specific view of the actual dynamic adjustments that operate in the economic process.⁸ Malinvaud points out that, in the short run, prices and wages tend to be rigid, or at least they react slowly to excess supply or demand.⁹ Wages tend to react to pressures in the labour market, varying when the demand for labour changes, according to the Phillips curve; but changes in wages are relatively small compared to the magnitude of the disequilibria that have generated them. Rapid adjustments of prices occur in the case of raw materials and agricultural products, but the prices of manufactured goods and services tend to be sticky. Changes in demand or supply have an immediate impact on inventories, waiting lines, delivery dates, hours of work, and employment. Therefore, the approach according to which prices and wages are flexible is not adequate for short-run macroeconomic analysis.

When money wages and prices are rigid, supply is not equal to demand, except in unlikely cases. As no one is obliged to exchange more than he wishes, the quantity exchanged will be equal to the minimum of total supply and total demand. “In the short run the consistency between individual actions is achieved by adjustments of quantities traded

⁶ Malinvaud (1977) page 5.

⁷ In his latter contributions Malinvaud, too, refers to this situation as “disequilibrium”; for example see Malinvaud (1998), Volume B, chapter 4.

⁸ See Malinvaud (1977) chapter 1.

⁹ This does not mean that prices and wages rigidities are the cause of unemployment, as many New Keynesians assert.

rather than of prices. Taking prices as given, the equilibrium concept we are looking for must explain the determination of quantities, and do so in a way that will be appropriate with respect to unemployment phenomenon”¹⁰.

Agents cannot be forced to engage in transactions that they do not want to make, so that in each market the short side determines the amount transacted, and the long side is rationed.

An important consequence of the existence of rationing is that a constraint on demand or supply in a given market induces agents to take account of it in their behaviour in the other markets. For example, if firms are rationed in sales, and if they cannot sell as much as they want at current prices, they take this into account on the labour market. They consequently employ fewer workers than they would if they were not rationed in their sales. At the same time, if there is rationing in the labour market, unemployed workers do not receive a wage and they are rationed on the demand side: in other words, they buy less than they would if they were employed.

The labour market and the goods and services market are interdependent, and they must be analyzed simultaneously.

A rationing scheme.

The theory of equilibrium with rationing can be illustrated by means of a simple scheme.¹¹ The economy is constrained by one of three factors: aggregate demand d , capacity y^* , full employment output βN , where N is the labour supply and β is labour productivity. In the short run, given capacity and labour productivity, production y is given by:¹²

¹⁰ Malinvaud (1977) page 12 .

¹¹ See Malinvaud (1980a and 1980b).

¹² To simplify, an absence of inventories is assumed.

$$y = \text{Min} (d , y^* , \beta N)$$

If $d = y^* = \beta N$, there is no excess demand for either goods or labour; in this case, we may speak of Walrasian equilibrium. If the three values are different, three cases must be distinguished:

1. If d is the smallest of the three values, sales are rationed because of lack of effective demand. Rationing in sales limits the demand for labour and the utilization of capacity. This is the case of Keynesian unemployment.

2. If y^* is the smallest of the three, as in the previous case, labour supply is rationed, but firms produce at full capacity. Unemployment is due to a lack of equipment. This can be explained by insufficient past capital accumulation which has caused the growth of capacity to fall short of the growth of the labour force. This is the case of classical unemployment.

3. If βN is the smallest value, there is excess demand for goods and excess demand for labour. There is full employment; firms do not produce at full capacity: they want to produce more, but they are unable to find enough workers to do so. Production is therefore determined by the labour supply. This is a situation of repressed inflation: that is, a situation in which prices and wages have not grown enough to satisfy excess demands.

Households are rationed in all three cases: on the labour market in a situation of Keynesian unemployment, on the goods market in a situation of repressed inflation, on both markets in a situation of classical unemployment.¹³

Simplifying, we may say that Keynesian unemployment is determined by an excessively high level of prices; or in other words, an excessively low purchasing power of wages. Classical unemployment seems to be determined mainly by a too high cost of

¹³ In principle there are other possible regimes of an intermediate character, namely those in which two of the three elements are equal.

labour, which gives rise to overly low profitability and therefore to insufficient growth in capacity. In a situation of repressed inflation, an excessively low level of prices generates too high demand for goods and services; at the same time, an excessively low level of wages generates too high demand for labour.

In the real world, it is rather difficult to distinguish between classical and Keynesian unemployment because different regimes tend to coexist in the same country. Often, there are sectors characterized by the presence of classical unemployment and in which firms are unable to satisfy the demand for their products because they lack capacity. At the same time some sectors may face a lack of demand for their products and therefore may not use all of their capacity. Disequilibria are not the same in all sectors and normally coexist in the same economy in different proportions.

A simple graph can illustrate how the disequilibrium situation of markets is connected with the disequilibrium of the price system¹⁴ (see Figure 1). Wages and prices are denoted by w and p . Point W represents the Walrasian equilibrium. Three lines starting from point W partition the plane: region C contains the points corresponding to classical unemployment, region K contains the points corresponding to Keynesian unemployment, and region I contains the points corresponding to repressed inflation. The farther away a point is from W , the larger is the market disequilibrium, the more flexible become prices and wages, as pressures on prices and wages increase. For example, if there is acute unemployment, the unemployed may accept badly paid jobs, which causes growing segmentation in the labour market.

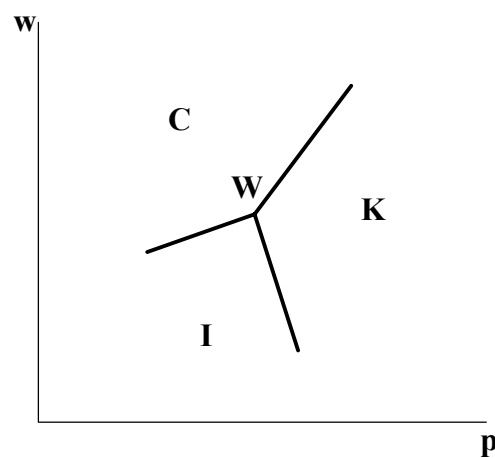
Nevertheless, if we consider only the points in the area around point W , the graph aids understanding of the impact of economic policies and of changes in exogenous variables on unemployment. As we will see, the graph is also very useful when analyzing

¹⁴ This graph is taken from Malinvaud (1998), Volume B, chapter 4.

the tendencies of unemployment beyond the short run, when wages and prices are no longer rigid.

Since we are concerned here with the unemployment problem, the following analysis will not consider repressed inflation.

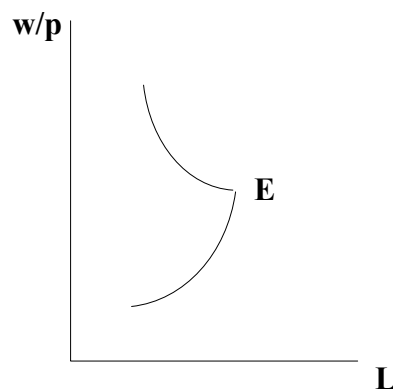
Figure 1
Domains of the various regimes



The above analysis implies a labour demand curve completely different from the traditional one often presented in the macroeconomics textbooks. In a graph where the quantity of labour is the abscissa and the real wage is the ordinate, this curve has a negative slope, meaning that the lower the real wage, the higher the demand for labour, and consequently that only classical unemployment exists. Such a representation is misleading as, implicitly, it transfers a microeconomic analysis directly to a macroeconomic context, without considering the interdependencies between the labour market and the goods market. If we consider the distinction between classical and Keynesian unemployment, the labour demand function can be represented by Figure 2, where E is a situation of full employment. The curve below point E has a positive slope because it

represents a situation of Keynesian unemployment, where an increase in real wages determines a growth in employment. The curve above point E has a negative slope and represents the situation of classical unemployment, where a growth in real wages implies a growth in unemployment. The kinked curve in Figure 2 should in fact be smoothed to take account of the existence of many markets and therefore of the simultaneous presence of classical and Keynesian unemployment in different sectors of the economy.

Figure 2
The curve of demand for labour



Keynesian unemployment

Keynesian unemployment is associated with an excess supply of both goods and labour. The mechanisms that cause Keynesian unemployment are those described by Keynes in the *General Theory*. Keynesian unemployment is associated with a lack of effective demand. Starting from a state of full employment equilibrium, it can be generated by a slowdown in a component of aggregate demand; the effect is then magnified by the multiplier.

There is a source of Keynesian unemployment that today warrants close consideration: the increase in labour productivity. The introduction of labour-saving technologies increases productivity, the result of which may be stagnation in the demand for labour and so-called technological unemployment. This is an important phenomenon not only in the industrial sector but also in some branches of the service sector. There are elements that may countervail this tendency; nevertheless, it is important to bear in mind that a decrease in the labour demand gives rise not only to a redistribution which is detrimental to wages but also to a decrease in output due to reduced demand by wage earners, whose propensity to consume is higher than the average.

The economic policies necessary to combat Keynesian unemployment are the typical Keynesian ones; but a price control or an increase in money wages may also raise demand and hence employment.¹⁵

In a Keynesian depression, wage moderation policies may have a negative effect on employment. Policies of this kind have been implemented in some European countries, such as Italy, in the past decade, and they have been motivated by the classical idea that the lower the real wages, the higher the demand for labour. But, as we have seen, in the case of Keynesian unemployment, a reduction in real wages implies a reduction of effective demand.

The only argument in favour of wage moderation concerns foreign trade. A reduction in the cost of labour and the consequent reduction in production costs may improve the country's competitiveness and therefore generate growth in aggregate demand. Obviously, this positive effect only arises if an analogous policy is not implemented abroad at the same time.

¹⁵ See Malinvaud (1984), chapter 3.

Classical unemployment

Classical unemployment arises when there is an excess demand for goods and an excess supply of labour. This situation may seem unlikely if we assume that prices are formed on the basis of the mark-up rule. If entrepreneurs forecast that demand will be higher than supply, and if there is unemployment, they may increase their output. Even if they incur increasing costs, they may employ more workers and transfer the increase in their costs to prices. Nevertheless there is a logical possibility that firms may consider it unprofitable to hire extra labour even if there is excess demand for their product. This may occur when firms produce at full capacity and there is strong complementarity between labour and capital. In this case, firms may decide not to increase capacity and not to employ more workers to meet the excess demand. This situation can be termed one of 'Marxian unemployment' because it implies the existence of a reserve army¹⁶ of workers unemployed because of insufficient previous capital accumulation. In other words, if for a long period of time profitability is low or if there are expectations of low profitability, firms will not run the risk of enlarging capacity, because this could be underutilized. They may even undertake premature removal of existing capacity. This restricts productive possibilities in the following period and increases the marginal cost of production.

In a closed economy, excess demand is manifest in competition among buyers; in an open economy, the lack of capacity gives rise to an increase of imports and consequently to a trade deficit.

Classical unemployment requires measures to increase profitability and, consequently, investments in new capacity. Wage moderation may favour an increase in profits, which stimulates the creation of new capacity; in its turn, this new capacity may create new jobs. However, this proposition cannot be taken for granted, for a wage moderation policy may generate Keynesian unemployment before full employment is

¹⁶ See Malinvaud (1980 b) page 24.

restored. In fact, if a lack of demand arises because of the wage moderation, firms have no incentive to invest in new capacity because it may be underutilized.

Classical unemployment often arises from adverse shocks on the supply side, such as sudden wage increases or oil shocks. But it can also be associated with factors that arise gradually, such as a deficiency of managerial capabilities, lack of infrastructures, or low expenditure on R&D, as has happened in Italy in recent decades. All these factors prevent an adequate growth of investments in new capacity.

Looking beyond the short term

Looking beyond the short term, it is necessary to bear in mind that prices and nominal wages are flexible, and that they are more flexible upwards than downwards. It is also realistic to assume that the adjustment speed is slower for wages than for prices.

In the case of repressed inflation, excess demand for goods and services and excess demand for labour lead to an increase in prices and nominal wages; this implies a tendency towards Walrasian equilibrium, although there may also be a tendency towards classical or Keynesian unemployment, depending on the dynamics of prices and wages adjustments.

In the case of Keynesian unemployment, if a corrective economic policy is not adopted, the depression tends to persist indefinitely. In fact unemployment implies a stagnation of money wages; consequently, the lack of demand for consumption tends to persist. The downward rigidity of prices prevents an increase in purchasing power; therefore firms do not increase their output because they cannot sell more, with the consequence that they do not increase their demand for labour. But even if prices and wages were flexible downwards, the real balance effect would be counterbalanced by negative expectations and by bankruptcies caused by a fall in prices.

Whilst the economy may be trapped for a long time in a situation of Keynesian unemployment, theoretically classical unemployment should be a transitory phenomenon. If there is unemployment and excess demand for goods, pressures on the markets push prices up; in the presence of unemployment, nominal wages should grow less than prices, and as a consequence real wages should tend to fall. Profitability increases, which should induce firms to make new investments and hence increase employment. But it should be borne in mind that building new capacity is not an instantaneous process; it may take a long time. Hence, classical unemployment does not tend to vanish quickly. It is important to consider that classical unemployment may turn into Keynesian unemployment.¹⁷ An insufficient flow of investments may lead to a growth of capacity which is lower than the increase in the full employment output.¹⁸ In this case, classical unemployment gives rise to a situation of Keynesian unemployment.

Moreover, when classical unemployment originates from a relatively high cost of labour compared to the cost of capital, firms tend to introduce labour saving technologies, which cause Keynesian unemployment.¹⁹

The dynamics of this process in the medium run is shown by Figure 3, where the arrows indicate movements of prices and wages. In the case of classical unemployment, excess demand for goods leads to an increase in prices; if nominal wages are rigid downwards, the equilibrium moves to the right. Hence classical unemployment seems to be a transitory situation that tends to end up in Keynesian unemployment. Repressed inflation tends to Walrasian equilibrium through the simultaneous adjustment of prices and

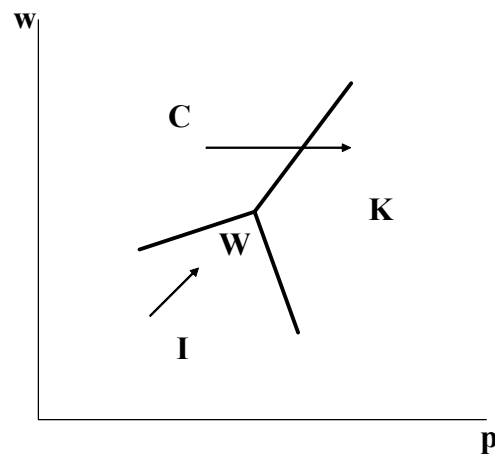
¹⁷ See Malinvaud (1980 b, 1983, 1984).

¹⁸ It is important to distinguish between two cases: 1) $y^* < \beta N < d$; if the rate of growth of y^* is higher than the rate of growth of β in a first time a situation will be reached in which $y^* = \beta N < d$; in a second time, because of the price increase, the Walrasian equilibrium will be reached with $y^* = \beta N = d$ 2) $y^* < d < \beta N$; if the rate of growth of y^* is higher than the rate of growth of β the situation will be: $y^* = d < \beta N$; therefore an equilibrium with unemployment will be reached. Thus classical unemployment becomes stable Keynesian unemployment.

¹⁹ See Malinvaud (1982).

wages. In a situation of Keynesian unemployment there are no automatic movements of prices and wages that tend to change the original situation.

Figure 3
Adjustments of prices and wages



A main conclusion from the foregoing analysis is that unemployment may become a persistent phenomenon, whatever its origin. It can thus help explain the phenomenon of “hysteresis” without *ad hoc* hypotheses.

Unemployment in an open economy

Malinvaud does not deal much with the problems of an open economy; his main contributions to the theory of unemployment were published in the 1970s and 1980s, when the liberalization of trade and capital flows had not reached the present level.

The problem of unemployment is more complex today because of the freedom of capital and goods movements and of the ‘global’ dimension of competition. The analysis of equilibrium with rationing still retains its value, but it should be integrated with the international context in mind. The investment strategy of firms must take account of real

and financial variables at a worldwide level in a situation of uncertainty and incomplete information; and the decisions taken are often irreversible.

Firms today can make financial investments on international markets without restrictions; these investments yield returns on capital that are higher and quicker than the returns on investments in new capacity. As a consequence, investments in new capacity are limited, whereas financial capital movements are growing. This process is more plausible, the more expectations of growth in demand are uncertain.

The increasing tendency to relocate productive activities to less industrialized countries restricts the growth of capacity in highly developed areas. This is particularly true of productions which compete on prices and utilize unskilled labour. This tendency has arisen for two main reasons: a) the dynamics of demand are higher in these markets, or at any rate they are expected to grow more rapidly; therefore a presence in these markets is strategically important; b) production costs are lower not only because of the lower cost of labour, but also because of lower taxation and less restrictive regulations on environmental protection and industrial safety.

The occurrence of classical unemployment seems to be a more likely phenomenon than in the past: the insufficient capital accumulation that generates classical unemployment may be the consequence of too low profitability if compared to investments abroad.

Nevertheless wage moderation policies may have a limited effect on employment in sectors affected by classical unemployment, while they tend to accelerate Keynesian unemployment. The need to reduce costs in order to face competition from less developed countries may make existing productive technologies obsolescent and require their substitution with labour saving technologies. This process may also take place when wages are sluggish; indeed, even if the cost of labour is reduced, it is not feasible to lower wages to the levels in the new industrialized countries. This problem is very apparent in

those countries where production is in competition with developing countries. Keynesian unemployment consequently arises, and its origin is both the introduction of labour saving innovations and wage moderation policies that limit the expansion of aggregate demand.

The Italian case is emblematic: most Italian firms are specialized in traditional production and compete with firms in emerging countries. This kind of competition fosters deregulation of the labour market, and this in its turn causes a stagnation of real wages. As a result, Keynesian unemployment has been growing, and it coexists with classical unemployment.

To summarize, in the context of a global economy, countries like Italy that have not been able to exploit the opportunities offered by technological change and undertake new technologically advanced productions are increasingly exposed to classical unemployment. The latter tends to persist in some sectors and also causes the onset of Keynesian unemployment through pressure on wages.

Unemployment in Italy

When the labour market in European countries is compared with that of the United States, their different performances are often explained in terms of rigidity *versus* flexibility. The rigidity of the labour market and the welfare system in Europe, it is argued, is the cause of growing unemployment and of the slow growth rate of the economy, whereas in the US flexibility in the labour market gives rise to a fast growth of GDP and employment. This argument would be convincing if unemployment were only classical; but it is misleading if we look at the causes of European unemployment. In most European countries during the 1990s, deregulation of the labour market and the reduction of welfare systems have not relieved the unemployment problem; on the contrary, they have exacerbated it because they have caused uncertainty and consequently a slackening of consumption. This approach therefore suggests therapies that in practice have proved

counter-productive²⁰ and economic policy guidelines that may increase the problem rather than solve it. Malinvaud's theory may be a more adequate instrument with which to examine the performance of the Italian economy and it may furnish useful suggestions for a correct economic policy. I shall therefore briefly review the main events in the Italian economy since the 1970s in the light of Malinvaud's theory.

In Italy, as in most European countries, unemployment has been growing since the early 1970s (see Table 1). The wage shocks at the end of the 1960s and the first oil crisis caused a slowdown in firms' profitability which started a phase of classical unemployment. Moreover, the uncertainty caused by the end of the Bretton Woods system made the situation worse. The magnitude of these disturbances should not be overvalued, however; the unemployment rate was still at a level that today would be considered definitely low (it increased from 5.1% in 1971 to 7.1% in 1980). However the disorders of the world economy and the oil crisis reduced the rate of productivity growth; an event that was to some extent foreseeable, given that productivity had been growing at an exceptionally high rate for more than two decades. Wages adjusted to the new economic conditions with some delay. During the 1970s real wages in Italy, as in most European countries, continued to grow quite rapidly: until 1977 they grew in Italy at a rate higher than the rate of growth of labour productivity. The cost of labour per unit of output increased as a consequence, causing a reduction in profits which reduced the rate of growth of investments. Moreover, since the late 1970s, new investments have been mainly in labour saving technologies, while investments in capacity have been low. During the 1980s productivity still grew relatively rapidly in the manufacturing sector.²¹ As a consequence

²⁰ The case of Spain is revealing: in 1984 several types of temporary contracts were introduced, so that by the end of the eighties 30% of employment was atypical. After a first period (1986-90) in which employment increased, unemployment once again began to grow. In 1997 restrictions were imposed on temporary work, and incentives were introduced for the conversion of temporary contracts into permanent ones, so that Spanish labour market became more rigid. A growth of employment came together with a decrease in flexibility.

²¹ During the period 1972-1991, labour productivity in the industrial sectors grew on average by 4% a year.

the demand for labour declined, the rate of growth of real wages slowed down, and demand for consumption slackened (see Table 2). The situation in the 1980s was one of classical unemployment which gradually turned into Keynesian unemployment because of labour saving investments when demand was sluggish. Other factors aggravated the unemployment problem. In the 1980s, the Italian economy was faced by problems connected with the international rise in the interest rates that affected the investment rate. In the 1990s restrictive budgetary policies were introduced in order to fulfil the Maastricht parameters. The effect of these events was a slowdown in the growth rate of the economy and an increase in Keynesian unemployment.

During the 1990s the situation deteriorated further (see Table 1): employment decreased by about 4% and the rate of unemployment reached almost 12% at the end of the decade. In this period unemployment seems to have been caused mainly by insufficient demand. Between 1991 and 2000 the real cost of labour per unit of output decreased by 13% and real wages fell by 0,1%.²² The rate of growth of demand declined in all its components (see Table 2).

Increasing unemployment reduced the bargaining power of workers, causing a stagnation of real wages which limited the growth rate of private consumption. At the same time the rate of growth of public consumption also decreased rapidly as successive governments sought to respect the parameters set by the Maastricht Treaty. Firms were constrained on the demand side and they therefore limited their expansion of capacity.

The visible presence of Keynesian unemployment does not contradict the statement that classical unemployment is becoming more important, as Malinvaud asserted at the end of the 1970s.²³ In Italy, capacity is fully employed in some industries,²⁴ at levels close

²² Italy is the only country in the European Union where real wages have fallen in the decade 1991-2000.

²³ See Malinvaud (1978).

²⁴ The industrial sectors showing the highest capacity utilization rate (more than 99% in 2000) are: energy products, chemicals and pharmaceutical products, non metallic mineral products, metal products, wood and furniture, paper-printing and publishing, rubber and plastic products.

to 100%. Apparently, given uncertainty in the economic environment and the prevailing expectations of low growth, firms operating in these sectors do not consider it profitable to increase capacity in order to meet excess demand, and this gives rise to an increase in imports.

Policy-makers have not adequately considered the characteristics of shocks and the sources of unemployment; they have taken measures that could have been effective in relation to supply side disturbances, when these were no longer decisive whilst a lack of demand was arising.

Measures to deregulate the labour market have been undertaken; they have a depressive effect on consumption because they increase household insecurity.

Fiscal policies have been implemented in order to increase and stabilize profits, and thus stimulate investments. Policies of this kind might have been effective in the past, but they are today weakened by the liberalization of capital movements, given that capitals move where the returns are higher. Hence, the growth in profits has not accelerated capital accumulation, while, as we have seen, wage stagnation has caused aggregate demand to slacken. Adverse expectations concerning demand have discouraged investments.

Table 1 Labour market indicators – Italy
Decennial changes of some variables.

	1971-80	1981-90	1991-2000
Labour force	+ 6.6 %	+7.4%	-4%
Employment	+4.1%	+2.4%	-4.1%
Activity rate*	+0.6	+0.5	-2.1
Employment rate*	+0.7	-2.3	-1.9
Unemployment rate*	+2.0	+1.5	+2.2
Real cost of labour per unit of output	0	-7.6%	-13.8%
Labour productivity	+26.8%	+16.9%	+15.7%
Real wages	+27.8%	+4.2%	-0.1%

* Change in percentage points

Sources: OECD, Eurostat, Istat

Table 2 Main economic indicators – Italy
 Components of demand
 Average annual rate of growth

	1973-79	1979-89	1989-2000
Private consumption	4.3	3.4	1.9
Public consumption	2.7	2.7	0.5
Total fixed investments	1.3	2.3	2.0
Construction	-0.8	0.4	0.4
Machinery and equipment	5.1	4.8	3.3
Changes in stocks and valuables	0.2	0.1	0.0
Total internal demand	3.5	3.1	1.6
Net exports	0.6	-0.3	0.2
Exports of goods and services	8.0	3.4	6.1
Imports of goods and services	4.8	5.7	5.8
GDP	4.0	2.7	1.7

Source: OECD

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